From: Roberson, Sharon
To: Wagner, Christine

Cc: Non-responsive based on revised scope Scurato, Jesse; Graybill, Eric Subject: R35727 - Validated Electronic Data for Shiloh Church Road

**Date:** Tuesday, May 19, 2020 1:06:00 PM

Attachments: R35727 C0B37 LTR.pdf

image001.png

R35727 C0B37 DVR.pdf R35727 C0B37 SSR.pdf

Christine Wagner US EPA Region 3 1650 Arch Street

Philadelphia, PA 19103-2029

Dear Christine,

Attached to this message you will find electronic files containing the validation report and validated data for the Shiloh Church Road site, Case # R35727, SDG C0B37. The validation of this case was completed by the Region III Environmental Services Assistance Team (ESAT).

Please contact ESAT's RPO, Eric Graybill by phone at 410-305-2665 or e-mail at <a href="mailto:Graybill.Eric@epa.gov">Graybill.Eric@epa.gov</a> if additional assistance is needed.

TO # 0002 TDF # 0120053



**Sharon Roberson** | Chemistry Data Manager | 410-305-3037 | Roberson.Sharon@epa.gov **ICF** | 701 Mapes Road, Fort Meade, MD 20755-5350

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION III



#### Environmental Sciences Center 701 Mapes Road Fort Meade, Maryland 20755-5350

DATE: 5/19/2020

SUBJECT: Region III Data QA Review

FROM: Eric Graybill

Region III ESAT RPO (3LS20)

TO: CHRIS WAGNER

Hazardous Site Cleanup Division (HSCD)

Attached is the data validation report for the SHILOH CHURCH RD REMOVAL ACTION site for DAS# R35727; SDG# C0B37 completed by the Region III Environmental Services Assistance Team (ESAT) contractor, ICF International, under the direction of Region III LSASD.

If you have any questions regarding this review, please call Eric Graybill at (410)-305-2665.

Attachment

cc:



TO: #0002 TDF: #0120053



ICF ESAT Region 3

US Environmental Protection Agency Environmental Science Center 701 Mapes Road Ft. Meade, MD 20755-5350

Phone 410-305-3012

**Date:** May 1, 2020

**To:** ESAT Region 3 Project Officer

From:

Validator

Reviewer

**Subject:** Organic Data Validation (S4VM)

Shiloh Church Road R35727 COB37

#### Overview

This data package consisted of one (1) water sample and four (4) soil samples analyzed for volatile, pesticide and semivolatile target analytes.

Analyses were performed by Chemtech (CHM). The samples were submitted to the laboratory directly by the sampling contractor. The laboratory indicated analyses were performed according to SW 846 Methods 8260C, 8270D and 8081B.

Data were validated according to the National Functional Guidelines for Organic Superfund Methods Data Review and applicable USEPA Region 3 modifications. Electronic validation was performed by the Electronic Data eXchange & Evaluation System (EXES). The validation report has been assigned the Superfund Data Validation Label S4VM (Stage\_4\_Validation\_Manual).

The following validation narrative is an evaluation of laboratory reported data based on the electronic data package received by Region 3 on January 7, 2020. The EDD provided was not consistent with EPA Region 3 format. The EDD was not revised as part of the validation and will not be provided with the validation report.

#### **Summary**

No significant data quality outliers or technical deficiencies were identified that required rejection of sample results. Results required estimation due to calibration issues, surrogate recovery and Matrix Spike/Matrix Spike Duplicate (MS/MSD) recoveries.

#### **Minor Problems**

In the semivolatile fraction, target analyte isophorone failed to meet the percent difference (%D) criteria in continuing calibration verification (CCV) standard BP001384.D. This analyte was non-detect in associated sample C0B40. This non-detect is estimated and has been qualified "UJ".

In the pesticide fraction, the percent recovery for surrogate tetrachloro-m-xylene were outside the upper control limits in the initial and diluted analyses of sample COB37. Detected concentrations of pesticides in this sample are estimated and have been qualified "J".

Percent recoveries for target analytes in Matrix Spike/Matrix Spike Duplicate (MS/MSD) analysis of pesticide sample COB37 were within control limits expect alpha-BHC, 4,4'-DDD and alpha-Chlordane had high recoveries. Relative Percent Differences (RPDs) were with control limits expect alpha-BHC. Detected concentrations of these analytes in the parent sample are estimated and have been qualified "J".

#### Notes

The laboratory reported non-detected results at the Method Detection Limit (MDL). Non-detected results are not reliable below the Reporting Limit (RL). The non-detected results were revised to the Reporting Limit (i.e., LOQ) and qualified "U".

Samples with detected concentrations for target analytes less than Contract Required Quantitation Limits (CRQLs) are estimated and have been qualified "J".

Pesticide results with %D >25% but <200% between the two analytical columns have been qualified "J". The lower of the two (2) column results is reported.

The method blanks in all fractions were free from contamination.

The percent recoveries for volatile target analytes in the Laboratory Control Samples (LCS) (VX1224MBS01) analysis were with control limits. No data were qualified based on LCS precision.

Percent recoveries and RPDs for volatile target analytes in the LCS/LCSD (VD1226SBS01/ VD1226SBSD01) analyses were within control limits. No data were qualified based on LCS/LCSD precision or accuracy.

Percent recoveries and RPDs for volatile target analytes in the LCS/LCSD (VX1223WBS01/ VX1223WBSD01) analyses were within control limits expect tetrachloroethene had a high RPD recovery. Associated sample C0B53 was non-detect for this analyte. No data were qualified based on these findings.

The percent recoveries for semivolatile/pesticide target analytes in the LCS analysis were with control limits. No data were qualified based on LCS precision.

R35727 C0B37 DCN: ESATR3-CY7-V493

In the volatile fractions, the following samples were initially analyzed at dilution to due high concentrations of target analytes. The CRQL in these samples are elevated due to the dilution factor. No data were qualified based on these findings.

Samples	Dilution factors
C0B37, C0B40	40x
COB38	20x

In the semivolatile fraction, 2,4,6-tribromophenol failed to meet the percent difference (%D) criteria in continuing calibration verification (CCV) standard BP001384.D. This analyte is used as a surrogate in the semivolatile analysis. No qualification of the data is necessary based on the surrogate %D.

In the semivolatile fraction, target analytes 1,4- dioxane, 2,4-dinitrophenol, 4,6-dinitro-2-methylphenol, 4-nitrophenol, benzo(g,h,i)perylene, hexachlorocyclopentadiene, hexachloroethane, indeno(1,2,3-cd)pyrene and pentachlorophenol failed to meet the percent difference (%D) criteria in continuing calibration verification (CCV) standard BP00408.D. The associated samples are the diluted analyses of C0B37 and C0B38. These analytes were not reported from the diluted analyses. No data were qualified based on these findings.

Concentrations for the following target analytes exceeded the calibration range in the initial analysis for the sample listed below. These samples were reanalyzed at the dilution listed in order to quantitate these analytes within the calibration range. Results for these analytes were reported from the dilution by the laboratory. There is no indication that these exceedance issues impacted subsequent sample analyses.

Fractions	Samples	Dilution factors	Analytes
Semivolatile	C0B37	5x	Naphthalene
	COB38	2x	3+4-Methylphenols
Pest	C0B37	10x	4,4-DDD

Sample calculation checks were performed. All calculated results had RPDs less than 5% of the reported results. No sample data were qualified.

Manual integrations were performed and identified by the laboratory. A subset of these was evaluated and were found to be accurate and consistent. No action was taken based on manual integrations.

Tentatively Identified Compounds (TICs) are not reviewed by data validators. The validation qualifiers are applied by EXES electronic validation based on laboratory qualifiers. By definition, all compounds identified as TICs should be treated as tentative identifications and all reported results should be considered estimated.

R35727 C0B37 DCN: ESATR3-CY7-V493

Glossary o	f Organic Data Qualifier Codes
Validation Qualifiers	In order of descending precedence. Only one of these qualifiers may apply to any result.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
UJ	The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
Additional Qualifiers	Additional qualifiers may be combined with other qualifiers.
N	The analyte has been "tentatively identified" or "presumptively" as present.
В	The result is presumed a blank contaminant. This qualifier is used for drinking water samples only.
С	The target Pesticide or Aroclor analyte identification has been confirmed by Gas Chromatography/Mass Spectrometry (GC/MS). This qualifier may be added to other qualifiers.
Х	The target Pesticide or Aroclor analyte identification was not confirmed when GC/MS analysis was performed. This qualifier may be added to other qualifiers.

R35727 C0B37 DCN: ESATR3-CY7-V493



Client:	Weston Solutions	Date Collected:	12/16/19	
Project:	R35727	Date Received:	12/20/19	encount.
Client Sample ID:	C0B37	SDG No.:	K6401	1
Lab Sample ID:	K6401-01	Matrix:	SOIL	1000
Analytical Method:	SW8260	% Moisture:	24.9	- STOREGE P
Sample Wt/Vol:	4.72 Units: g	Final Vol:	10000 uL	9
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10	
GC Column:	DB-624UI ID: 0.18	Level:	MED	ă.

File ID/Qc Batch: Dilution: Prep Date Date Analyzed Prep Batch ID
VX014239.D 40 12/24/19 12:55 VX122419

CAS Number	Parameter	Conc. Qu	alifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS		4.0				
75-71-8	Dichlorodifluoromethane	5100 25000	U	5100	28200	ug/Kg
74-87-3	Chloromethane	10100	U	10100	28200	ug/Kg
75-01-4	Vinyl Chloride	6300	U	6300	28200	ug/Kg
74-83-9	Bromomethane	2100	U	2100	28200	ug/Kg
75-00-3	Chloroethane	3 <del>200</del>	U	3200	28200	ug/Kg
75-69-4	Trichlorofluoromethane	<del>360</del> 0	$\mathbf{U}$	3600	28200	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	4500	$\mathbf{U}$	4500	28200	ug/Kg
75-35-4	1,1-Dichloroethene	5600	U	5600	28200	ug/Kg
67-64-1	Acetone	43300 14100	U	43300	141000	ug/Kg
75-15-0	Carbon Disulfide	6000 28200	U	6000	28200	ug/Kg
1634-04-4	Methyl tert-butyl Ether	7900	U	7900	28200	ug/Kg
79-20-9	Methyl Acetate	15900	U	15900	28200	ug/Kg
75-09-2	Methylene Chloride	29300 5640	n e	29300	56400	ug/Kg
156-60-5	trans-1,2-Dichloroethene	-7100 28200	U	7100	28200	ug/Kg
75-34-3	1,1-Dichloroethane	.5100	U	5100	28200	ug/Kg
110-82-7	Cyclohexane	10100	U	10100	28200	ug/Kg
78-93-3	2-Butanone	37600 14100	U	37600	141000	ug/Kg
56-23-5	Carbon Tetrachloride	-4700 20200	$\mathbf{U}$	4700	28200	ug/Kg
156-59-2	cis-1,2-Dichloroethene	-5600	U	5600	28200	ug/Kg
74-97-5	Bromochloromethane	6700	U	6700	28200	ug/Kg
67-66-3	Chloroform	4900	U	4900	28200	ug/Kg
71-55-6	1,1,1-Trichloroethane	6000	U	6000	28200	ug/Kg
108-87-2	Methylcyclohexane	6700	U	6700	28200	ug/Kg
71-43-2	Benzene	4700	U	4700	28200	ug/Kg
107-06-2	1,2-Dichloroethane	6800	U	6800	28200	ug/Kg
79-01-6	Trichloroethene	49500		5300	28200	ug/Kg
78-87-5	1,2-Dichloropropane	7000- 2920	U	7000	28200	ug/Kg
75-27-4	Bromodichloromethane	5600	U	5600	28200	ug/Kg
108-10-1	4-Methyl-2-Pentanone	31600 i4100	U	31600	141000	ug/Kg
108-88-3	Toluene	5500-2820	U	5500	28200	ug/Kg
10061-02-6	t-1,3-Dichloropropene	5700	U	5700	28200	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	6000	U	6000	28200	ug/Kg

1/2/20

# CHEMITECH

### Report of Analysis

Client:	Weston Solutions	Date Collected:	12/16/19	
Project:	R35727	Date Received:	12/20/19	
Client Sample ID:	C0B37	SDG No.:	K6401	-
Lab Sample ID:	K6401-01	Matrix:	SOIL	
Analytical Method:	SW8260	% Moisture:	24.9	-
Sample Wt/Vol:	4.72 Units: g	Final Vol:	10000 uL	
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10	
GC Column:	DB-624UI ID: 0.18	Level:	MED	1
1				

File ID/Qc Batch: Dilution: Prep Date Date Analyzed Prep Batch ID VX014239.D 40 12/24/19 12:55 VX122419

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight
79-00-5	1,1,2-Trichloroethane	- <del>800</del> 0 28	700 U	8000	28200	ug/Kg
591-78-6	2-Hexanone	41600 14		41600	141000	ug/Kg
124-48-1	Dibromochloromethane	9400 28	200 U	7400	28200	ug/Kg
106-93-4	1,2-Dibromoethane	7300	U	7300	28200	ug/Kg
127-18-4	Tetrachloroethene	3900	U	3900	28200	ug/Kg
108-90-7	Chlorobenzene	4400	U	4400	28200	ug/Kg
100-41-4	Ethyl Benzene	122000		4800	28200	ug/Kg
179601-23-1	m/p-Xylenes	435000		9300	56400	ug/Kg
95-47-6	o-Xylene	164000		6200	28200	ug/Kg
100-42-5	Styrene	5600 28	200 U	5600	28200	ug/Kg
75-25-2	Bromoform	18500 2		18500	28200	ug/Kg
98-82-8	Isopropylbenzene	6700	J	4900	28200	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	6100 25	LOO U	6100	28200	ug/Kg
541-73-1	1,3-Dichlorobenzene	.6000	U	6000	28200	ug/Kg
106-46-7	1,4-Dichlorobenzene	6000	U	6000	28200	ug/Kg
95-50-1	1,2-Dichlorobenzene	7200	U	7200	28200	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	18800	U	18800	28200	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	.6300	U	6300	28200	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	7200	U	7200	28200	ug/Kg
SURROGATES						.,
17060-07-0	1,2-Dichloroethane-d4	49.0		56 - 120	98%	SPK: 50
1868-53-7	Dibromofluoromethane	48.4		57 - 135	97%	SPK: 50
2037-26-5	Toluene-d8	50.1		67 - 123	100%	SPK: 50
460-00-4	4-Bromofluorobenzene	49.1		33 - 141	98%	SPK: 50
INTERNAL STA	NDARDS					
363-72-4	Pentafluorobenzene	546000	5.65			
540-36-3	1,4-Difluorobenzene	847000	6.85			
3114-55-4	Chlorobenzene-d5	774000	10.11			
3855-82-1	1,4-Dichlorobenzene-d4	359000	12.07			
TENTATIVE IDI	ENTIFIED COMPOUNDS					
000111-84-2	Nonane	218000	J		10.4	ug/Kg
	unknown10.64	68100	J		10.6	ug/Kg
002051-30-1	Octane, 2,6-dimethyl-	98900	J		10.8	ug/Kg

4/2/20



# 5

#### Report of Analysis

1			
Client:	Weston Solutions	Date Collected:	12/16/19
Project:	R35727	Date Received:	12/20/19
Client Sample ID:	C0B37	SDG No.:	K6401
Lab Sample ID:	K6401-01	Matrix:	SOIL
Analytical Method:	SW8260	% Moisture:	24.9
Sample Wt/Vol:	4.72 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10
GC Column:	DB-624UI ID: 0.18	Level:	MED

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID	- CONTRACTOR
VX014239.D	40		12/24/19 12:55	VX122419	

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
000696-29-7	Cyclohexane, (1-methylethyl)-	73700	J		10.9	ug/Kg
005911-04-6	Nonane, 3-methyl-	102000	J		11.2	ug/Kg
103-65-1	n-propylbenzene	10800	J		11.3	ug/Kg
000611-14-3	Benzene, 1-ethyl-2-methyl-	63900	J		11.4	ug/Kg
108-67-8	1,3,5-Trimethylbenzene	42400	J		11.5	ug/Kg
98-06-6	tert-Butylbenzene	4900	J		11.8	ug/Kg
95-63-6	1,2,4-Trimethylbenzene	75600	J		11.8	ug/Kg
135-98-8	sec-Butylbenzene	6700	J		11.9	ug/Kg
99-87-6	p-Isopropyltoluene	7500	J		12.1	ug/Kg
006975-98-0	Decane, 2-methyl-	70500	J		12.2	ug/Kg
013151-34-3	Decane, 3-methyl-	60900	J		12.2	ug/Kg
104-51-8	n-Butylbenzene	13900	J		12.4	ug/Kg
001120-21-4	Undecane	230000	J		12.5	ug/Kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

5



K6401

### Report of Analysis

Client:	Weston Solutions	Date Collected:	12/16/19	9000
Project:	R35727	Date Received:	12/20/19	
Client Sample ID:	C0B38	SDG No.:	K6401	K
Lab Sample ID:	K6401-04	Matrix:	SOIL	100
Analytical Method:	SW8260	% Moisture:	28.1	Table 1
Sample Wt/Vol:	4.58 Units: g	Final Vol:	1 <b>0000</b> uL	900400
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10	
GC Column:	DB-624UI ID: 0.18	Level:	MED	
				- 2

File ID/Qc Batch: Dilution: Prep Date Date Analyzed Prep Batch ID
VX014240.D 20 12/24/19 13:19 VX122419

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight
TARGETS			20			
75-71-8	Dichlorodifluoromethane	2800152		2800	15200	ug/Kg
74-87-3	Chloromethane	<del>-540</del> 0	U	5400	15200	ug/Kg
75-01-4	Vinyl Chloride	3400	U	3400	15200	ug/Kg
74-83-9	Bromomethane	<del>-1100</del>	U	1100	15200	ug/Kg
75-00-3	Chloroethane	1700	U	1700	15200	ug/Kg
75-69-4	Trichlorofluoromethane	<del>2000</del>	U	2000	15200	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	2400	U	2400	15200	ug/Kg
75-35-4	1,1-Dichloroethene	3000	U	3000	15200	ug/Kg
67-64-1	Acetone	23300.7	5900 U	23300	75900	ug/Kg
75-15-0	Carbon Disulfide	3300 15	200U	3300	15200	ug/Kg
1634-04-4	Methyl tert-butyl Ether	4200	U	4200	15200	ug/Kg
79-20-9	Methyl Acetate	8500	J U	8500	15200	ug/Kg
75-09-2	Methylene Chloride	15800-3	0400 U	15800	30400	ug/Kg
156-60-5	trans-1,2-Dichloroethene	-3800- iS	200 U	3800	15200	ug/Kg
75-34-3	1,1-Dichloroethane	<b>52800</b>	U	2800	15200	ug/Kg
110-82-7	Cyclohexane	<5500	U	5500	15200	ug/Kg
78-93-3	2-Butanone	20300 7	5900 U	20300	75900	ug/Kg
56-23-5	Carbon Tetrachloride	2500-15	200 U	2500	15200	ug/Kg
156-59-2	cis-1,2-Dichloroethene	3000	U	3000	15200	ug/Kg
74-97-5	Bromochloromethane	3600	U	3600	15200	ug/Kg
67-66-3	Chloroform	2600	U	2600	15200	ug/Kg
71-55-6	1,1,1-Trichloroethane	3200	U	3200	15200	ug/Kg
108-87-2	Methylcyclohexane	<del>-3600</del>	U	3600	15200	ug/Kg
71-43-2	Benzene	2500	U	2500	15200	ug/Kg
107-06-2	1,2-Dichloroethane	3600	U	3600	15200	ug/Kg
79-01-6	Trichloroethene	4600	J	2800	15200	ug/Kg
78-87-5	1,2-Dichloropropane	3800	U	3800	15200	ug/Kg
75-27-4	Bromodichloromethane	3000	U	3000	15200	ug/Kg
108-10-1	4-Methyl-2-Pentanone	17000-7	5900U	17000	75900	ug/Kg
108-88-3	Toluene	<del>-6800</del> 15		3000	15200	ug/Kg
10061-02-6	t-1,3-Dichloropropene	3100	U	3100	15200	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	3300	U	3300 Non-responsive b	15200	ug/Kg



	Client:	Weston Solutions	Date Collected:	12/16/19	
	Project:	R35727	Date Received:	12/20/19	
	Client Sample ID:	C0B38	SDG No.:	K6401	0
-	Lab Sample ID:	K6401-04	Matrix:	SOIL	153
	Analytical Method:	SW8260	% Moisture:	28.1	1000
	Sample Wt/Vol:	4.58 Units: g	Final Vol:	10000 uL	Constant of the Constant of th
	Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10	
	GC Column:	DB-624UI ID: 0.18	Level:	MED	
					1.00

File ID/Qc Batch: Dilution: Prep Date Date Analyzed Prep Batch ID

VX014240.D 20 12/24/19 13:19 VX122419

CAS Number	Parameter		Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
79-00-5	1,1,2-Trichloroethane	4300 15Z	U	4300	15200	ug/Kg
591-78-6	2-Hexanone	22400 75	00 U	22400	75900	ug/Kg
124-48-1	Dibromochloromethane	4000 152	U	4000	15200	ug/Kg
106-93-4	1,2-Dibromoethane	<del>3900</del>	U	3900	15200	ug/Kg
127-18-4	Tetrachloroethene	<del>-2100</del>	U	2100	15200	ug/Kg
108-90-7	Chlorobenzene	2400	U	2400	15200	ug/Kg
100-41-4	Ethyl Benzene	110000		2600	15200	ug/Kg
179601-23-1	m/p-Xylenes	369000		5000	30400	ug/Kg
95-47-6	o-Xylene	87800		3300	15200	ug/Kg
100-42-5	Styrene	3000 15Z	00 U	3000	15200	ug/Kg
75-25-2	Bromoform	10000	U	10000	15200	ug/Kg
98-82-8	Isopropylbenzene	2600	U	2600	15200	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	3300	U	3300	15200	ug/Kg
541-73-1	1,3-Dichlorobenzene	3200	U	3200	15200	ug/Kg
106-46-7	1,4-Dichlorobenzene	<del>-3200</del>	U	3200	15200	ug/Kg
95-50-1	1,2-Dichlorobenzene	3900	U	3900	15200	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	10100	U	10100	15200	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	3400	U	3400	15200	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	3900	U	3900	15200	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	49.7		56 - 120	99%	SPK: 50
1868-53-7	Dibromofluoromethane	48.8		57 - 135	98%	SPK: 50
2037-26-5	Toluene-d8	50.4		67 - 123	101%	SPK: 50
460-00-4	4-Bromofluorobenzene	48.5		33 - 141	97%	SPK: 50
INTERNAL STA	NDARDS					
363-72-4	Pentafluorobenzene	532000	5.65			
540-36-3	1,4-Difluorobenzene	818000	6.85			
3114-55-4	Chlorobenzene-d5	749000	10.11			
3855-82-1	1,4-Dichlorobenzene-d4	343000	12.07			
TENTATIVE IDI	ENTIFIED COMPOUNDS					
	unknown1.62	17100	J		1.62	ug/Kg





# CHEMITECH

# Report of Analysis

Client:	Weston Solutions	Date Collected:	12/17/19
Project:	R35727	Date Received:	12/20/19
Client Sample ID:	C0B39	SDG No.:	K6401
Lab Sample ID:	K6401-05	Matrix:	SOIL
Analytical Method:	SW8260	% Moisture:	22.9
Sample Wt/Vol:	3.33 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-VMS ID: 0.18	Level:	LOW

AND A STATE OF THE PARTY OF THE	X-SCHEENWARD WAS ENDER THE TOWN TO THE TAX OF THE TAX O		MERCHANIA CHARACTER PROTESTA MARTINES CONSTRUCTOR	A RESIDENT AND A CONTRACT OF THE SECOND AND A SECOND ASSESSMENT AND A SECOND ASSESSMENT	ORDER PORTAGO POR PORTAGO
File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID	-
VD064593.D	1		12/26/19 12:17	VD122619	Name of the last

CAS Number	Parameter	Conc. Qu	nalifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
75-71-8	Dichlorodifluoromethane	5.30	J	1.80	9.70	ug/Kg
74-87-3	Chloromethane	3.509,70	U	3.50	9.70	ug/Kg
75-01-4	Vinyl Chloride	2.20	U	2.20	9.70	ug/Kg
74-83-9	Bromomethane	0.74	U	0.74	9.70	ug/Kg
75-00-3	Chloroethane	1.10	U	1.10	9.70	ug/Kg
75-69-4	Trichlorofluoromethane	1.30	U	1.30	9.70	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	<del>-1.60</del>	$\mathbf{U}$	1.60	9.70	ug/Kg
75-35-4	1,1-Dichloroethene	1.90	U	1.90	9.70	ug/Kg
67-64-1	Acetone	25.8	J	15.0	48.7	ug/Kg
75-15-0	Carbon Disulfide	2.10-9.70	U	2.10	9.70	ug/Kg
1634-04-4	Methyl tert-butyl Ether	2.70	U	2.70	9.70	ug/Kg
79-20-9	Methyl Acetate	5.50	U	5.50	9.70	ug/Kg
75-09-2	Methylene Chloride	10.1 19.5	U	10.1	19.5	ug/Kg
156-60-5	trans-1,2-Dichloroethene	2.40 G. 70	U	2.40	9.70	ug/Kg
75-34-3	1,1-Dichloroethane	1.80	U	1.80	9.70	ug/Kg
110-82-7	Cyclohexane	3.50	U	3.50	9.70	ug/Kg
78-93-3	2-Butanone	3.50 13.048.7	U	13.0	48.7	ug/Kg
56-23-5	Carbon Tetrachloride	1.60 9.70	U	1.60	9.70	ug/Kg
156-59-2	cis-1,2-Dichloroethene	1.90	U	1.90	9.70	ug/Kg
74-97-5	Bromochloromethane	2.30	U	2.30	9.70	ug/Kg
67-66-3	Chloroform	3.60	J	1.70	9.70	ug/Kg
71-55-6	1,1,1-Trichloroethane	2.10	U	2.10	9.70	ug/Kg
108-87-2	Methylcyclohexane	2.30	U	2.30	9.70	ug/Kg
71-43-2	Benzene	.1.60	U	1.60	9.70	ug/Kg
107-06-2	1,2-Dichloroethane	2.30	$\mathbf{U}$	2.30	9.70	ug/Kg
79-01-6	Trichloroethene	1.80	U	1.80	9.70	ug/Kg
78-87-5	1,2-Dichloropropane	2.40	U	2.40	9.70	ug/Kg
75-27-4	Bromodichloromethane	1.90	U	1.90	9.70	ug/Kg
108-10-1	4-Methyl-2-Pentanone	10.9 48:7	U	10.9	48.7	ug/Kg
108-88-3	Toluene	1.90-9.70	U	1.90	9.70	ug/Kg
10061-02-6	t-1,3-Dichloropropene	2.00	U	2.00	9.70	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	2.10	U	2.10	9.70	ug/Kg





Client:	Weston Solutions	Date Collected:	12/17/19
Project:	R35727	Date Received:	12/20/19
Client Sample ID:	C0B39	SDG No.:	K6401
Lab Sample ID:	K6401-05	Matrix:	SOIL
Analytical Method:	SW8260	% Moisture:	22.9
Sample Wt/Vol:	3.33 Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	RTX-VMS ID: 0.18	Level:	LOW

File ID/Qc Batch: Dilution: Prep Date Date Analyzed Prep Batch ID
VD064593.D 1 12/26/19 12:17 VD122619

CAS Number	Parameter	Conc. C	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight
79-00-5	1,1,2-Trichloroethane	2.80-9.70	U	2.80	9.70	ug/Kg
591-78-6	2-Hexanone	14.4-48.7	U	14.4	48.7	ug/Kg
124-48-1	Dibromochloromethane	2.60 9.70	U	2.60	9.70	ug/Kg
106-93-4	1,2-Dibromoethane	-2.50	U	2.50	9.70	ug/Kg
127-18-4	Tetrachloroethene	1.40	U	1.40	9.70	ug/Kg
108-90-7	Chlorobenzene	1.50	U	1.50	9.70	ug/Kg
100-41-4	Ethyl Benzene	1.70	U	1.70	9.70	ug/Kg
179601-23-1	m/p-Xylenes	3.20 19.5	U	3.20	19.5	ug/Kg
95-47-6	o-Xylene	-2.109.70	U	2.10	9.70	ug/Kg
100-42-5	Styrene	-1.90	U	1.90	9.70	ug/Kg
75-25-2	Bromoform	6.40	U	6.40	9.70	ug/Kg
98-82-8	Isopropylbenzene	1.70	U	1.70	9.70	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	2.10	U	2.10	9.70	ug/Kg
541-73-1	1,3-Dichlorobenzene	2.10	U	2.10	9.70	ug/Kg
106-46-7	1,4-Dichlorobenzene	2.10	U	2.10	9.70	ug/Kg
95-50-1	1,2-Dichlorobenzene	2.50	U	2.50	9.70	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	6.50	U	6.50	9.70	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	2.20	U	2.20	9.70	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	2.50	U	2.50	9.70	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	58.0		56 - 120	116%	SPK: 50
1868-53-7	Dibromofluoromethane	52.2		57 - 135	104%	SPK: 50
2037-26-5	Toluene-d8	51.4		67 - 123	103%	SPK: 50
460-00-4	4-Bromofluorobenzene	65.9		33 - 141	132%	SPK: 50
INTERNAL STA						
363-72-4	Pentafluorobenzene	298000	7.98			
540-36-3	1,4-Difluorobenzene	482000	8.87			
3114-55-4	Chlorobenzene-d5	509000	11.65			
3855-82-1	1,4-Dichlorobenzene-d4	269000	13.58			







Client:	Weston Solutions	Date Collected:	12/17/19	- 1
Project:	R35727	Date Received:	12/20/19	
Client Sample ID:	C0B40	SDG No.:	K6401	
Lab Sample ID:	K6401-06	Matrix:	SOIL	
Analytical Method:	SW8260	% Moisture:	27.9	-
Sample Wt/Vol:	5.27 Units: g	Final Vol:	10000 uL	
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10	
GC Column:	DB-624UI ID: 0.18	Level:	MED	1

File ID/Qc Batch: Dilution: Prep Date Date Analyzed Prep Batch ID
VX014242.D 40 12/24/19 14:05 VX122419

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS			. 0			
75-71-8	Dichlorodifluoromethane	4800 24	360 U	4800	26300	ug/Kg
74-87-3	Chloromethane	.9400	U	9400	26300	ug/Kg
75-01-4	Vinyl Chloride	5900	U	5900	26300	ug/Kg
74-83-9	Bromomethane	<del>-200</del> 0	U	2000	26300	ug/Kg
75-00-3	Chloroethane	-3000	U	3000	26300	ug/Kg
75-69-4	Trichlorofluoromethane	.3400	U	3400	26300	ug/Kg
76-13-1	1,1,2-Trichlorotrifluoroethane	4 <del>200</del> -	U	4200	26300	ug/Kg
75-35-4	1,1-Dichloroethene	5200	U	5200	26300	ug/Kg
67-64-1	Acetone	40400 13		40400	132000	ug/Kg
75-15-0	Carbon Disulfide	5600 26	n co	5600	26300	ug/Kg
1634-04-4	Methyl tert-butyl Ether	<del>-7300</del>	U	7300	26300	ug/Kg
79-20-9	Methyl Acetate	14800	U	14800	26300	ug/Kg
75-09-2	Methylene Chloride	27300 52	100 A	27300	52600	ug/Kg
156-60-5	trans-1,2-Dichloroethene	660026	300 A	6600	26300	ug/Kg
75-34-3	1,1-Dichloroethane	4800	U	4800	26300	ug/Kg
110-82-7	Cyclohexane	9500	U	9500	26300	ug/Kg
78-93-3	2-Butanone	-35100 13	Z000U	35100	132000	ug/Kg
56-23-5	Carbon Tetrachloride	430026		4300	26300	ug/Kg
156-59-2	cis-1,2-Dichloroethene	5200	U	5200	26300	ug/Kg
74-97-5	Bromochloromethane	6300	U	6300	26300	ug/Kg
67-66-3	Chloroform	-4500	U	4500	26300	ug/Kg
71-55-6	1,1,1-Trichloroethane	5600	U	5600	26300	ug/Kg
108-87-2	Methylcyclohexane	6200	U	6200	26300	ug/Kg
71-43-2	Benzene	4400	U	4400	26300	ug/Kg
107-06-2	1,2-Dichloroethane	6300	U	6300	26300	ug/Kg
79-01-6	Trichloroethene	4900	U	4900	26300	ug/Kg
78-87-5	1,2-Dichloropropane	6600	U	6600	26300	ug/Kg
75-27-4	Bromodichloromethane	5200	U	5200	26300	ug/Kg
108-10-1	4-Methyl-2-Pentanone	29400 13	7000 A	29400	132000	ug/Kg
108-88-3	Toluene	5100 26	300 U	5100	26300	ug/Kg
10061-02-6	t-1,3-Dichloropropene	5300	U	5300	26300	ug/Kg
10061-01-5	cis-1,3-Dichloropropene	5600	U	5600	26300	ug/Kg





Client:	Weston Solutions	Date Collected:	12/17/19
Project:	R35727	Date Received:	12/20/19
Client Sample ID:	C0B40	SDG No.:	K6401
Lab Sample ID:	K6401-06	Matrix:	SOIL
Analytical Method:	SW8260	% Moisture:	27.9
Sample Wt/Vol:	5.27 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	100 uL	Test:	VOC-TCLVOA-10
GC Column:	DB-624UI ID: 0.18	Level:	MED

File ID/Qc Batch: Dilution: Prep Date Date Analyzed Prep Batch ID
VX014242.D 40 12/24/19 14:05 VX122419

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
79-00-5	1,1,2-Trichloroethane	7500 243	300 U	7500	26300	ug/Kg
591-78-6	2-Hexanone	38800 1370	000 U	38800	132000	ug/Kg
124-48-1	Dibromochloromethane	-6900 243	OD U	6900	26300	ug/Kg
106-93-4	1,2-Dibromoethane	6800	U	6800	26300	ug/Kg
127-18-4	Tetrachloroethene	3700	U	3700	26300	ug/Kg
108-90-7	Chlorobenzene	13200	J	4100	26300	ug/Kg
100-41-4	Ethyl Benzene	-4500 263C	O U	4500	26300	ug/Kg
179601-23-1	m/p-Xylenes	8700 520	100 A	8700	52600	ug/Kg
95-47-6	o-Xylene	5800 263	00 U	5800	26300	ug/Kg
100-42-5	Styrene	5200	U	5200	26300	ug/Kg
75-25-2	Bromoform	17300	U	17300	26300	ug/Kg
98-82-8	Isopropylbenzene	4600	U	4600	26300	ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	5700	U	5700	26300	ug/Kg
541-73-1	1,3-Dichlorobenzene	114000		5600	26300	ug/Kg
106-46-7	1,4-Dichlorobenzene	164000		5600	26300	ug/Kg
95-50-1	1,2-Dichlorobenzene	326000		6700	26300	ug/Kg
96-12-8	1,2-Dibromo-3-Chloropropane	17500 26	U OOS	17500	26300	ug/Kg
120-82-1	1,2,4-Trichlorobenzene	15300	J	5900	26300	ug/Kg
87-61-6	1,2,3-Trichlorobenzene	6700 263	500 U	6700	26300	ug/Kg
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	48.3		56 - 120	97%	SPK: 50
1868-53-7	Dibromofluoromethane	48.4		57 - 135	97%	SPK: 50
2037-26-5	Toluene-d8	50.4		67 - 123	101%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.7		33 - 141	95%	SPK: 50
INTERNAL STA						
363-72-4	Pentafluorobenzene	550000	5.65			
540-36-3	1,4-Difluorobenzene	837000	6.85			
3114-55-4	Chlorobenzene-d5	761000	10.11			
3855-82-1	1,4-Dichlorobenzene-d4	356000	12.07			







Client:	Weston Solutions	Date Collected:	12/19/19
Project:	R35727	Date Received:	12/20/19
Client Sample ID:	C0B53	SDG No.:	K6401
Lab Sample ID:	K6401-07	Matrix:	Water
Analytical Method:	SW8260	% Moisture:	100
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10
GC Column:	DB-624UI ID: 0.18	Level:	LOW

File ID/Qc Batch: Dilution: Prep Date Date Analyzed Prep Batch ID
VX014207.D 1 12/23/19 17:09 VX122319

CAS Number	Parameter	Conc. Qu	alifier	MDL	LOQ / CRQL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	-0.22 5.0	U	0.22	5.00	ug/L
74-87-3	Chloromethane	0.30	U	0.30	5.00	ug/L
75-01-4	Vinyl Chloride	0.16	U	0.16	5.00	ug/L
74-83-9	Bromomethane	2.10	U	2.10	5.00	ug/L
75-00-3	Chloroethane	0.34	U	0.34	5.00	ug/L
75-69-4	Trichlorofluoromethane	0.16	U	0.16	5.00	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.21	U	0.21	5.00	ug/L
75-35-4	1,1-Dichloroethene	0.18	U	0.18	5.00	ug/L
67-64-1	Acetone	29,90 25,0	U	0.90	25.0	ug/L
75-15-0	Carbon Disulfide	0.23 5,0	U	0.23	5.00	ug/L
1634-04-4	Methyl tert-butyl Ether	0.070	U	0.070	5.00	ug/L
79-20-9	Methyl Acetate	0.65	U	0.65	5.00	ug/L
75-09-2	Methylene Chloride	0.33	U	0.33	5.00	ug/L
156-60-5	trans-1,2-Dichloroethene	<del>-0.2</del> 4	U	0.24	5.00	ug/L
75-34-3	1,1-Dichloroethane	0.17	U	0.17	5.00	ug/L
110-82-7	Cyclohexane	1.20	U	1.20	5.00	ug/L
78-93-3	2-Butanone	0.71 25.0	U	0.71	25.0	ug/L
56-23-5	Carbon Tetrachloride	0.22 5.0	U	0.22	5.00	ug/L
156-59-2	cis-1,2-Dichloroethene	0.30	U	0.30	5.00	ug/L
74-97-5	Bromochloromethane	_0.31	U	0.31	5.00	ug/L
67-66-3	Chloroform	0.14	U	0.14	5.00	ug/L
71-55-6	1,1,1-Trichloroethane	0.12	U	0.12	5.00	ug/L
108-87-2	Methylcyclohexane	0.17	U	0.17	5.00	ug/L
71-43-2	Benzene	-0.10	U	0.10	5.00	ug/L
107-06-2	1,2-Dichloroethane	<del>-0.1</del> 3	U	0.13	5.00	ug/L
79-01-6	Trichloroethene	-0.27	U	0.27	5.00	ug/L
78-87-5	1,2-Dichloropropane	_0.14	U	0.14	5.00	ug/L
75-27-4	Bromodichloromethane	0.10	U	0.10	5.00	ug/L
108-10-1	4-Methyl-2-Pentanone	-0.85 25.0	U	0.85	25.0	ug/L
108-88-3	Toluene	0.12 5.0	U	0.12	5.00	ug/L
10061-02-6	t-1,3-Dichloropropene	0.19	U	0.19	5.00	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.16	U	0.16	5.00	ug/L



# HOTTECH

# Report of Analysis

Client:	Weston Solutions	Date Collected:	12/19/19	
Project:	R35727	Date Received:	12/20/19	
Client Sample ID:	C0B53	SDG No.:	K6401	C
Lab Sample ID:	K6401-07	Matrix:	Water	
Analytical Method:	SW8260	% Moisture:	100	3 300
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL	
Soil Aliquot Vol:	uL	Test:	VOC-TCLVOA-10	
GC Column:	DB-624UI ID: 0.18	Level:	LOW	1

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID	
VX014207.D	1		12/23/19 17:09	VX122319	

AS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
9-00-5	1,1,2-Trichloroethane	-0.12 5	o U	0.12	5.00	ug/L
91-78-6	2-Hexanone	1.40 25	U 6,6	1.40	25.0	ug/L
24-48-1	Dibromochloromethane	-0.16 6.	O U	0.16	5.00	ug/L
06-93-4	1,2-Dibromoethane	0.14	U	0.14	5.00	ug/L
27-18-4	Tetrachloroethene	. 0.15	U	0.15	5.00	ug/L
08-90-7	Chlorobenzene	0.080	U	0.080	5.00	ug/L
00-41-4	Ethyl Benzene	-0.080	U	0.080	5.00	ug/L
79601-23-1	m/p-Xylenes	0.20 10.	.0 U	0.20	10.0	ug/L
5-47-6	o-Xylene	_0.13 5	O	0.13	5.00	ug/L
00-42-5	Styrene	0.11	U	0.11	5.00	ug/L
5-25-2	Bromoform	0.15	U	0.15	5.00	ug/L
8-82-8	Isopropylbenzene	0.13	U	0.13	5.00	ug/L
9-34-5	1,1,2,2-Tetrachloroethane	0.15	U	0.15	5.00	ug/L
41-73-1	1,3-Dichlorobenzene	· 0.14	U	0.14	5.00	ug/L
06-46-7	1,4-Dichlorobenzene	0.20	U	0.20	5.00	ug/L
5-50-1	1,2-Dichlorobenzene	0.12	U	0.12	5.00	ug/L
6-12-8	1,2-Dibromo-3-Chloropropane	0.54	U	0.54	5.00	ug/L
20-82-1	1,2,4-Trichlorobenzene	0.24	U	0.24	5.00	ug/L
7-61-6	1,2,3-Trichlorobenzene	0.26	U	0.26	5.00	ug/L
URROGATES						
7060-07-0	1,2-Dichloroethane-d4	48.2		61 - 141	96%	SPK: 50
868-53-7	Dibromofluoromethane	49.2		69 - 133	98%	SPK: 50
037-26-5	Toluene-d8	49.6		65 - 126	99%	SPK: 50
60-00-4	4-Bromofluorobenzene	46.2		58 - 135	92%	SPK: 50
TERNAL STAI	NDARDS					
63-72-4	Pentafluorobenzene	578000	5.65			
40-36-3	1,4-Difluorobenzene	885000	6.85			
114-55-4	Chlorobenzene-d5	791000	10.11			
855-82-1	1,4-Dichlorobenzene-d4	352000	12.07			
ENTATIVE IDE	ENTIFIED COMPOUNDS					
07446-09-5	Sulfur dioxide	8.30	J		1.27	ug/L





Injection Volume:



#### **Report of Analysis**

Client:	Weston Solutions				Date Collected:	12/16/19	
Project:	R35727				Date Received:	12/20/19	
Client Sample ID:	C0B37				SDG No.:	K6401	
Lab Sample ID:	K6401-01				Matrix:	SOIL	
Analytical Method:	SW8270				% Moisture:	24.9	
Sample Wt/Vol:	30.06 Units:	g			Final Vol:	1000	uL
Soil Aliquot Vol:		uL			Test:	SVOC-TCI	BNA-20
Extraction Type:			Decanted:	N	Level:	LOW	

Amintration of the service service management	Delay territoria del Charles d			THE PROPERTY OF THE PROPERTY OF THE PARTY OF	mercento,
File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID	
BP001376.D	1	12/23/19 08:45	12/23/19 19:38	PB125662	

GPC Factor: 1.0

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight
TARGETS						
100-52-7	Benzaldehyde	130 4	40 U	130	440	ug/Kg
108-95-2	Phenol	83.3	U	83.3	440	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	-140	U	140	440	ug/Kg
95-57-8	2-Chlorophenol	.87.6	U	87.6	440	ug/Kg
95-48-7	2-Methylphenol	93.3	U	93.3	440	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	120	U	120	440	ug/Kg
98-86-2	Acetophenone	120	U	120	440	ug/Kg
65794-96-9	3+4-Methylphenols	.130	U	130	440	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	-180	U	180	440	ug/Kg
67-72-1	Hexachloroethane	110	U	110	440	ug/Kg
98-95-3	Nitrobenzene	-57.6	U	57.6	440	ug/Kg
78-59-1	Isophorone	48.7	U	48.7	440	ug/Kg
88-75-5	2-Nitrophenol	100 4	40 U	100	440	ug/Kg
105-67-9	2,4-Dimethylphenol	1200		73.3	440	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	68.4 4		68.4	440	ug/Kg
120-83-2	2,4-Dichlorophenol	-68.14	40 U	68.1	440	ug/Kg
91-20-3	Naphthalene	6300	E	66.1	440	ug/Kg
106-47-8	4-Chloroaniline	180-L	40 U	180	440	ug/Kg
87-68-3	Hexachlorobutadiene	80.7	U	80.7	440	ug/Kg
105-60-2	Caprolactam	150	U	150	440	ug/Kg
59-50-7	4-Chloro-3-methylphenol	78.6	U	78.6	440	ug/Kg
91-57-6	2-Methylnaphthalene	540		81.7	440	ug/Kg
77-47-4	Hexachlorocyclopentadiene	2904	40 U	290	440	ug/Kg
88-06-2	2,4,6-Trichlorophenol	80.4	U	80.4	440	ug/Kg
95-95-4	2,4,5-Trichlorophenol	78.6	U	78.6	440	ug/Kg
92-52-4	1,1-Biphenyl	-140	U	140	440	ug/Kg
91-58-7	2-Chloronaphthalene	100	U	100	440	ug/Kg
88-74-4	2-Nitroaniline	92.4	V U	92.4	440	ug/Kg
131-11-3	Dimethylphthalate	540		67.1	440	ug/Kg
208-96-8	Acenaphthylene	79.74	40 U	79.7	440	ug/Kg
606-20-2	2,6-Dinitrotoluene	93.9	U	93.9 Non-responsive	440	ug/Kg

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GPC Cleanup:

PH:



# Report of Analysis

Client:	Weston S	Solutions		Date Collected:	12/16/19	
Project:	R35727			Date Received:	12/20/19	
Client Sample ID:	C0B37			SDG No.:	<b>K640</b> 1	
Lab Sample ID:	K6401-0	1		Matrix:	SOIL	
Analytical Method:	SW8270			% Moisture:	24.9	
Sample Wt/Vol:	30.06	Units:	g	Final Vol:	1000	uL
Soil Aliquot Vol:			uL	Test:	SVOC-TO	CL BNA -20
Extraction Type:			Decanted: N	Level:	LOW	
Injection Volume:			GPC Factor: 1.0	GPC Cleanup:	N	PH:

 File ID/Qc Batch:
 Dilution:
 Prep Date
 Date Analyzed
 Prep Batch ID

 BP001376.D
 1
 12/23/19 08:45
 12/23/19 19:38
 PB125662

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight
99-09-2	3-Nitroaniline	170-4	40 U	170	440	ug/Kg
83-32-9	Acenaphthene	-90.1	· U	90.1	440	ug/Kg
51-28-5	2,4-Dinitrophenol	120	U	120	440	ug/Kg
100-02-7	4-Nitrophenol	85.8	U	85.8	440	ug/Kg
132-64-9	Dibenzofuran	120	U	120	440	ug/Kg
121-14-2	2,4-Dinitrotoluene	110	U	110	440	ug/Kg
84-66-2	Diethylphthalate	-84.0	U	84.0	440	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	110	U	110	440	ug/Kg
86-73-7	Fluorene	67.7	U	67.7	440	ug/Kg
100-01-6	4-Nitroaniline	120-	U	120	440	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	-92.8	U	92.8	440	ug/Kg
86-30-6	n-Nitrosodiphenylamine	100	U	100	440	ug/Kg
101-55-3	4-Bromophenyl-phenylether	74.9	U	74.9	440	ug/Kg
118-74-1	Hexachlorobenzene	88.4	U	88.4	440	ug/Kg
1912-24-9	Atrazine	_110	U	110	440	ug/Kg
87-86-5	Pentachlorophenol	140	U	140	440	ug/Kg
85-01-8	Phenanthrene	75.8	U	75.8	440	ug/Kg
120-12-7	Anthracene	74.T	U	74.1	440	ug/Kg
86-74-8	Carbazole	-120	U	120	440	ug/Kg
84-74-2	Di-n-butylphthalate	<del>-130</del> -	U	130	440	ug/Kg
206-44-0	Fluoranthene	·65.7	U	65.7	440	ug/Kg
129-00-0	Pyrene	80.9	U	80.9	440	ug/Kg
85-68-7	Butylbenzylphthalate	84.8	U	84.8	440	ug/Kg
91-94-1	3,3-Dichlorobenzidine	200	U	200	440	ug/Kg
56-55-3	Benzo(a)anthracene		U	50.0	440	ug/Kg
218-01-9	Chrysene	56.5 4	49 U	56.5	440	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	490		120	440	ug/Kg
117-84-0	Di-n-octyl phthalate	94.7-1	40 U	94.7	440	ug/Kg
205-99-2	Benzo(b)fluoranthene	64.6	U	64.6	440	ug/Kg
207-08-9	Benzo(k)fluoranthene	74.8	U	74.8	440	ug/Kg
50-32-8	Benzo(a)pyrene	58.9	U	58.9	440	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	96.1	U	96.1	440	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	69.5	U	69.5	440	ug/Kg

K6401-SVOC-TCL BNA -20

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Client:	Weston Solutions	Date Collected: 12/16/19
Project:	R35727	Date Received: 12/20/19
Client Sample ID:	C0B37	SDG No.: K6401
Lab Sample ID:	K6401-01	Matrix: SOIL
Analytical Method:	SW8270	% Moisture: 24.9
Sample Wt/Vol:	30.06 Units: g	Final Vol: 1000 uL
Soil Aliquot Vol:	uL	Test: SVOC-TCL BNA -20
Extraction Type:	Decanted: N	Level: LOW
Injection Volume:	GPC Factor: 1.0	GPC Cleanup: N PH:

File ID/Qc Batch:	Dilution:	Prep Date		Date Analyzed	Prep Batch ID	
BP001376.D	1	12/23/19	08:45	12/23/19 19:38	PB125662	
CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ/CRQL	Units(Dry Weight)
191-24-2	Benzo(g,h,i)perylene	81.2 4	40 U	81.2	440	ug/Kg
95-94-3	1.2.4.5-Tetrachlorobenzene	100	11	100	440	ug/Kg

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
191-24-2	Benzo(g,h,i)perylene	81.2 44	O U	81.2	440	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	100	U	100	440	ug/Kg
123-91-1	1,4-Dioxane	160	U	160	440	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	55.3	U	55.3	440	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	71.2		28 - 127	47%	SPK: 150
13127-88-3	Phenol-d6	160		34 - 127	106%	SPK: 150
4165-60-0	Nitrobenzene-d5	65.0		31 - 132	65%	SPK: 100
321-60-8	2-Fluorobiphenyl	59.3		39 - 123	59%	SPK: 100
118-79-6	2,4,6-Tribromophenol	87.5		30 - 133	58%	SPK: 150
1718-51-0	Terphenyl-d14	58.8		37 - 115	59%	SPK: 100
INTERNAL STA	ANDARDS					
3855-82-1	1,4-Dichlorobenzene-d4	76800	8.42			
1146-65-2	Naphthalene-d8	176000	10.39			
15067-26-2	Acenaphthene-d10	96000	13.2			
1517-22-2	Phenanthrene-d10	185000	15.61			
1719-03-5	Chrysene-d12	159000	19.26			
1520-96-3	Perylene-d12	173000	21.07			
TENTATIVE ID	ENTIFIED COMPOUNDS					
000108-38-3	Benzene, 1,3-dimethyl-	2900	J		6.67	ug/Kg
000111-84-2	Nonane	3200	J		6.80	ug/Kg
002051-30-1	Octane, 2,6-dimethyl-	1600	J		7.28	ug/Kg
541-73-1	1,3-Dichlorobenzene	510	J		8.35	ug/Kg
106-46-7	1,4-Dichlorobenzene	860	J		8.45	ug/Kg
95-50-1	1,2-Dichlorobenzene	1700	J		8.68	ug/Kg
001074-43-7	Benzene, 1-methyl-3-propyl-	2000	J		8.89	ug/Kg
000105-05-5	Benzene, 1,4-diethyl-	2800	J		8.95	ug/Kg
	unknown9.05	1900	J		9.05	ug/Kg
001120-21-4	Undecane	65600	J		9.48	ug/Kg
	unknown9.59	10000	J		9.59	ug/Kg
	unknown9.65	6700	J		9.65	ug/Kg
000095-93-2	Benzene, 1,2,4,5-tetramethyl-	8900	J	Non-responsive based	9.69	ug/Kg

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### Report of Analysis

Client:	Weston Solutions		Date Collected:	12/16/19
Project:	R35727		Date Received:	12/20/19
Client Sample ID:	C0B37DL		SDG No.:	K6401
Lab Sample ID:	K6401-01DL		Matrix:	SOIL
Analytical Method:	SW8270		% Moisture:	24.9
Sample Wt/Vol:	30.06 Units:	g	Final Vol:	1000 uL
Soil Aliquot Vol:		uL	Test:	SVOC-TCL BNA -20
Extraction Type:		Decanted: N	Level:	LOW
Injection Volume:		GPC Factor: 1.0	GPC Cleanup:	N PH:

arawata matawa mamaka tamba			District the state of the state		reunz product
File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID	
BP001410.D	5	12/23/19 08:45	12/25/19 06:49	PB125662	

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	-650 22	OD UD	650	2200	ug/Kg
108-95-2	Phenol	420	UD	420	2200	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	690	UD	690	2200	ug/Kg
95-57-8	2-Chlorophenol	440	UD	440	2200	ug/Kg
95-48-7	2-Methylphenol	470	UD	470	2200	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	590	UD	590	2200	ug/Kg
98-86-2	Acetophenone	620	UD	620	2200	ug/Kg
65794-96-9	3+4-Methylphenols	650	UD	650	2200	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	910	UD	910	2200	ug/Kg
67-72-1	Hexachloroethane	560	UD	560	2200	ug/Kg
98-95-3	Nitrobenzene	290	UD	290	2200	ug/Kg
78-59-1	Isophorone	240	UD	240	2200	ug/Kg
88-75-5	2-Nitrophenol	510	UD	510	2200	ug/Kg
105-67-9	2,4-Dimethylphenol	1100	JD	370	2200	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	340	UD	340	2200	ug/Kg
120-83-2	2,4-Dichlorophenol	340	UD	340	2200	ug/Kg
91-20-3	Naphthalene	5600	B	330	2200	ug/Kg
106-47-8	4-Chloroaniline	910 22	UD GO	910	2200	ug/Kg
87-68-3	Hexachlorobutadiene	400	UD	400	2200	ug/Kg
105-60-2	Caprolactam	750	UD	750	2200	ug/Kg
59-50-7	4-Chloro-3-methylphenol	390	UD	390	2200	ug/Kg
91-57-6	2-Methylnaphthalene	560	JD ·	410	2200	ug/Kg
77-47-4	Hexachlorocyclopentadiene	1500	UD	1500	2200	ug/Kg
88-06-2	2,4,6-Trichlorophenol	400	UD	400	2200	ug/Kg
95-95-4	2,4,5-Trichlorophenol	390	UD	390	2200	ug/Kg
92-52-4	1,1-Biphenyl	690	UD	690	2200	ug/Kg
91-58-7	2-Chloronaphthalene	500	UD	500	2200	ug/Kg
88-74-4	2-Nitroaniline	460	UD	460	2200	ug/Kg
131-11-3	Dimethylphthalate	520	JD	340	2200	ug/Kg
208-96-8	Acenaphthylene	400	UD	400	2200	ug/Kg
606-20-2	2,6-Dinitrotoluene	470	/ UD	470	2200	ug/Kg

12/20

Raw Data: BP001410.D



284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

#### Report of Analysis

Client: Weston Solutions Date Collected: 12/16/19 Project: R35727 Date Received: 12/20/19 Client Sample ID: C0B37DL SDG No .: K6401 Lab Sample ID: K6401-01DL Matrix: SOIL Analytical Method: SW8270 % Moisture: 24.9 Sample Wt/Vol: 30.06 Units: Final Vol: 1000 uL g Test: SVOC-TCL BNA -20 Soil Aliquot Vol: uL Extraction Type: Decanted: N Level: LOW Injection Volume: GPC Factor: 1.0 GPC Cleanup: N PH:

 File ID/Qc Batch:
 Dilution:
 Prep Date
 Date Analyzed
 Prep Batch ID

 BP001410.D
 5
 12/23/19 08:45
 12/25/19 06:49
 PB125662

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight
99-09-2	3-Nitroaniline	860	2201 UD	860	2200	ug/Kg
83-32-9	Acenaphthene	450	UD	450	2200	ug/Kg
51-28-5	2,4-Dinitrophenol	580	UD	580	2200	ug/Kg
100-02-7	4-Nitrophenol	430	UD	430	2200	ug/Kg
132-64-9	Dibenzofuran	600	UD	600	2200	ug/Kg
121-14-2	2,4-Dinitrotoluene	550	UD	550	2200	ug/Kg
84-66-2	Diethylphthalate	420	UD	420	2200	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	550	UD	550	2200	ug/Kg
86-73-7	Fluorene	340	UD	340	2200	ug/Kg
100-01-6	4-Nitroaniline	580	UD	580	2200	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	460	UD	460	2200	ug/Kg
86-30-6	n-Nitrosodiphenylamine	510	UD	510	2200	ug/Kg
101-55-3	4-Bromophenyl-phenylether	370	UD	370	2200	ug/Kg
118-74-1	Hexachlorobenzene	440	UD	440	2200	ug/Kg
1912-24-9	Atrazine	530	UD	530	2200	ug/Kg
87-86-5	Pentachlorophenol	710	UD	710	2200	ug/Kg
85-01-8	Phenanthrene	380	UD	380	2200	ug/Kg
120-12-7	Anthracene	370	UD	370	2200	ug/Kg
86-74-8	Carbazole	600	UD	600	2200	ug/Kg
84-74-2	Di-n-butylphthalate	660	UD	660	2200	ug/Kg
206-44-0	Fluoranthene	330	UD	330	2200	ug/Kg
129-00-0	Pyrene	400	UD	400	2200	ug/Kg
85-68-7	Butylbenzylphthalate	420	UD	420	2200	ug/Kg
91-94-1	3,3-Dichlorobenzidine	980	UD	980	2200	ug/Kg
56-55-3	Benzo(a)anthracene	250	UD	250	2200	ug/Kg
218-01-9	Chrysene	280	UD	280	2200	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	610	UD	610	2200	ug/Kg
117-84-0	Di-n-octyl phthalate	470	UD	470	2200	ug/Kg
205-99-2	Benzo(b)fluoranthene	320	UD	320	2200	ug/Kg
207-08-9	Benzo(k)fluoranthene	370	UD	370	2200	ug/Kg
50-32-8	Benzo(a)pyrene	290	UD	290	2200	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	480	UD	480	2200	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	350	UD	350	2200	ug/Kg
6401 SVOC TCI					72 -	£ 075

K6401-SVOC-TCL BNA -20



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#### Report of Analysis

Client:	Weston Solutions	Date Collected:	12/16/19
Project:	R35727	Date Received:	12/20/19
Client Sample ID:	C0B37DL	SDG No.:	K6401
Lab Sample ID:	K6401-01DL	Matrix:	SOIL
Analytical Method:	SW8270	% Moisture:	24.9
Sample Wt/Vol:	30.06 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type:	Decanted: N	Level:	LOW
Injection Volume:	GPC Factor: 1.0	GPC Cleanup:	N PH:

File ID/Os Patak	Piletian	Day Date		Data Analysed	Dung Batak l	CONTRACTOR OF THE PROPERTY OF
File ID/Qc Batch:	Dilution:	Prep Date		Date Analyzed	Prep Batch l	ш
BP001410.D	5	12/23/19	08:45	12/25/19 06:49	PB125662	
CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
191-24-2	Benzo(g,h,i)perylene	410 2	UD UD	410	2200	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	520	UD	520	2200	ug/Kg
123-91-1	1,4-Dioxane	780	UD	780	2200	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	280	UD	280	2200	ug/Kg

123-71-1	1,4-Dioxanc	700	CD	700	2200	ug/1cg
58-90-2	2,3,4,6-Tetrachlorophenol	280	UD	280	2200	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	108		28 - 127	72%	SPK: 150
13127-88-3	Phenol-d6	125		34 - 127	84%	SPK: 150
4165-60-0	Nitrobenzene-d5	91.7		31 - 132	92%	SPK: 100
321-60-8	2-Fluorobiphenyl	60.4		39 - 123	60%	SPK: 100
118-79-6	2,4,6-Tribromophenol	74.2		30 - 133	49%	SPK: 150
1718-51-0	Terphenyl-d14	59.9		37 - 115	60%	SPK: 100
INTERNAL STAN	NDARDS					
3855-82-1	1,4-Dichlorobenzene-d4	38300	8.32			
1146-65-2	Naphthalene-d8	119000	10.33			
15067-26-2	Acenaphthene-d10	68200	13.18			
1517-22-2	Phenanthrene-d10	126000	15.58			
1719-03-5	Chrysene-d12	102000	19.23			

21

109000



U = Not Detected

1520-96-3

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

Perylene-d12

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



### Report of Analysis

Client:	Weston Solutions	Date Collected: 12/16/19
Project:	R35727	Date Received: 12/20/19
Client Sample ID:	C0B38	SDG No.: K6401
Lab Sample ID:	K6401-04	Matrix: SOIL
Analytical Method:	SW8270	% Moisture: 28.1
Sample Wt/Vol:	30 Units: g	Final Vol: 1000 uL
Soil Aliquot Vol:	uL	Test: SVOC-TCL BNA -20
Extraction Type:	Decanted: N	Level: LOW
Injection Volume:	GPC Factor: 1.0	GPC Cleanup: N PH:

 File ID/Qc Batch:
 Dilution:
 Prep Date
 Date Analyzed
 Prep Batch ID

 BP001374.D
 1
 12/23/19 08:45
 12/23/19 18:38
 PB125662

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	140 460	U	140	460	ug/Kg
108-95-2	Phenol	140	J	87.2	460	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	-140-460	U	140	460	ug/Kg
95-57-8	2-Chlorophenol	91.6	U	91.6	460	ug/Kg
95-48-7	2-Methylphenol	1500		97.7	460	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	120-46	0 U	120	460	ug/Kg
98-86-2	Acetophenone	130-460	U	130	460	ug/Kg
65794-96-9	3+4-Methylphenols	5600	E	140	460	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	190460	U	190	460	ug/Kg
67-72-1	Hexachloroethane	120	U	120	460	ug/Kg
98-95-3	Nitrobenzene	60.3.	U	60.3	460	ug/Kg
78-59-1	Isophorone	51.0	U	51.0	460	ug/Kg
88-75-5	2-Nitrophenol	11046	U	110	460	ug/Kg
105-67-9	2,4-Dimethylphenol	2500		76.8	460	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	71.5 460	U	71.5	460	ug/Kg
120-83-2	2,4-Dichlorophenol	71.3	U	71.3	460	ug/Kg
91-20-3	Naphthalene	.69.2	U	69.2	460	ug/Kg
106-47-8	4-Chloroaniline	190	U	190	460	ug/Kg
87-68-3	Hexachlorobutadiene	84 5	U	84.5	460	ug/Kg
105-60-2	Caprolactam	160	U	160	460	ug/Kg
59-50-7	4-Chloro-3-methylphenol	82.3	U	82.3	460	ug/Kg
91-57-6	2-Methylnaphthalene	85.5	U	85.5	460	ug/Kg
77-47-4	Hexachlorocyclopentadiene	310	U	310	460	ug/Kg
88-06-2	2,4,6-Trichlorophenol	84.1	U	84.1	460	ug/Kg
95-95-4	2,4,5-Trichlorophenol	82.2	U	82.2	460	ug/Kg
92-52-4	1,1-Biphenyl	140	U	140	460	ug/Kg
91-58-7	2-Chloronaphthalene	100	U	100	460	ug/Kg
88-74-4	2-Nitroaniline	96.7 dle	o U	96.7	460	ug/Kg
131-11-3	Dimethylphthalate	420	J	70.3	460	ug/Kg
208-96-8	Acenaphthylene	-83.4 46	U	83.4	460	ug/Kg
606-20-2	2,6-Dinitrotoluene	98.3	U	98.3	460	ug/Kg

### Report of Analysis

Client:	Weston Solutions	Date Collected: 12/16/19	
Project:	R35727	Date Received: 12/20/19	
Client Sample ID:	C0B38	SDG No.: K6401	
Lab Sample ID:	K6401-04	Matrix: SOIL	
Analytical Method:	SW8270	% Moisture: 28.1	
Sample Wt/Vol:	30 Units: g	Final Vol: 1000	uL
Soil Aliquot Vol:	uL	Test: SVOC-TCL BNA	<b>4</b> -20
Extraction Type:	Decanted: N	Level: LOW	
Injection Volume :	GPC Factor: 1.0	GPC Cleanup: N PH:	

File ID/Qc Batch:	Dilution:	Prep Date		Date Analyzed	Prep Batch	ID
BP001374.D	1	12/23/19 08	:45	12/23/19 18:38	PB125662	rancoversion and contracted in the contract of
CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
99-09-2	3-Nitroaniline	480460	U	180	460	ug/Kg
83-32-9	Acenaphthene	94.3	U	94.3	460	ug/Kg
51-28-5	2,4-Dinitrophenol	120	U	120	460	ug/Kg
100-02-7	4-Nitrophenol	89.8	U	89.8	460	ug/Kg
132-64-9	Dibenzofuran	120	U	120	460	ug/Kg
121-14-2	2,4-Dinitrotoluene	120	U	120	460	ug/Kg
84-66-2	Diethylphthalate	87.9	U	87.9	460	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	120	U	120	460	ug/Kg

51-28-5	2,4-Dinitrophenol	120	U	120	460	ug/Kg	
100-02-7	4-Nitrophenol	89.8	U	89.8	460	ug/Kg	
132-64-9	Dibenzofuran	120	U	120	460	ug/Kg	
121-14-2	2,4-Dinitrotoluene	120	U	120	460	ug/Kg	
84-66-2	Diethylphthalate	87.9	U	87.9	460	ug/Kg	
7005-72-3	4-Chlorophenyl-phenylether	120	U	120	460	ug/Kg	
86-73-7	Fluorene	70.8	U	70.8	460	ug/Kg	
100-01-6	4-Nitroaniline	120	U	120	460	ug/Kg	
534-52-1	4,6-Dinitro-2-methylphenol	97.1	U	97.1	460	ug/Kg	
86-30-6	n-Nitrosodiphenylamine	110	U	110	460	ug/Kg	
101-55-3	4-Bromophenyl-phenylether	78.4	U	78.4	460	ug/Kg	
118-74-1	Hexachlorobenzene	92.5	U	92.5	460	ug/Kg	
1912-24-9	Atrazine	110	U	110	460	ug/Kg	
87-86-5	Pentachlorophenol	150	U	150	460	ug/Kg	
85-01-8	Phenanthrene	79.4	U	79.4	460	ug/Kg	
120-12-7	Anthracene	77.5	U	77.5	460	ug/Kg	
86-74-8	Carbazole	120	U	120	460	ug/Kg	
84-74-2	Di-n-butylphthalate	140	U	140	460	ug/Kg	
206-44-0	Fluoranthene	68.8	U	68.8	460	ug/Kg	
129-00-0	Pyrene	84.7	U	84.7	460	ug/Kg	
85-68-7	Butylbenzylphthalate	88.7	U	88.7	460	ug/Kg	
91-94-1	3,3-Dichlorobenzidine	210	U	210	460	ug/Kg	
56-55-3	Benzo(a)anthracene	52.3	U	52.3	460	ug/Kg	
218-01-9	Chrysene	59.2 M	o U	59.2	460	ug/Kg	
117-81-7	Bis(2-ethylhexyl)phthalate	200	J	130	460	ug/Kg	
117-84-0	Di-n-octyl phthalate	99,1 40	Po U	99.1	460	ug/Kg	
205-99-2	Benzo(b)fluoranthene	67.6	U	67.6	460	ug/Kg	
207-08-9	Benzo(k)fluoranthene	78.3	U	78.3	460	ug/Kg	
50-32-8	Benzo(a)pyrene	61.7	U	61.7	460	ug/Kg	
193-39-5	Indeno(1,2,3-cd)pyrene	100	U	100	460	ug/Kg	
53-70-3	Dibenzo(a,h)anthracene	72.8	U	72.8	460	ug/Kg	
K6401-SVOC-	TCL BNA -20		11	6.	88	of 975	

4/2/20

Raw Data: BP001374.D



284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

### Report of Analysis

Client:	Weston Solutions	Date Collected: 12/16/19
Project:	R35727	Date Received: 12/20/19
Client Sample ID:	C0B38	SDG No.: K6401
Lab Sample ID:	K6401-04	Matrix: SOIL
Analytical Method:	SW8270	% Moisture: 28.1
Sample Wt/Vol:	30 Units: g	Final Vol: 1000 u
Soil Aliquot Vol:	$\mathbf{u}\mathbf{L}$	Test: SVOC-TCL BNA -
Extraction Type:	Decanted: N	Level: LOW
Injection Volume:	GPC Factor: 1.0	GPC Cleanup: N PH:

File ID/Qc Batch: Dilution: Prep Date Date Analyzed Prep Batch ID BP001374.D 12/23/19 08:45 12/23/19 18:38 PB125662 1

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
191-24-2	Benzo(g,h,i)perylene	85.0 440	U	85.0	460	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	110	U	110	460	ug/Kg
123-91-1	1,4-Dioxane	160	U	160	460	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	57.9	U	57.9	460	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	92.4		28 - 127	62%	SPK: 150
13127-88-3	Phenol-d6	98.8		34 - 127	66%	SPK: 150
4165-60-0	Nitrobenzene-d5	53.1		31 - 132	53%	SPK: 100
321-60-8	2-Fluorobiphenyl	58.3		39 - 123	58%	SPK: 100
118-79-6	2,4,6-Tribromophenol	94.7		30 - 133	63%	SPK: 150
1718-51-0	Terphenyl-d14	68.0		37 - 115	68%	SPK: 100
INTERNAL STA	NDARDS					
3855-82-1	1,4-Dichlorobenzene-d4	52400	8.3			
1146-65-2	Naphthalene-d8	210000	10.34			
15067-26-2	Acenaphthene-d10	112000	13.2			
1517-22-2	Phenanthrene-d10	217000	15.6			
1719-03-5	Chrysene-d12	148000	19.25			
1520-96-3	Perylene-d12	151000	21.03			
TENTATIVE ID	ENTIFIED COMPOUNDS					
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	650	AB		5.62	ug/Kg
000108-38-3	Benzene, 1,3-dimethyl-	1800	J		6.55	ug/Kg
	unknown7.95	3600	JB		7.95	ug/Kg
000104-76-7	1-Hexanol, 2-ethyl-	1200	J		8.45	ug/Kg
000108-68-9	Phenol, 3,5-dimethyl-	770	J		10.1	ug/Kg
000099-89-8	Phenol, 4-(1-methylethyl)-	370	J		10.7	ug/Kg
000698-71-5	Phenol, 3-ethyl-5-methyl-	280	J		10.8	ug/Kg
003855-26-3	Phenol, 2-ethyl-4-methyl-	1100	J		11.0	ug/Kg
000622-80-0	Benzenamine, N-propyl-	1600	J		13.4	ug/Kg
000057-10-3	n-Hexadecanoic acid	330	J		16.5	ug/Kg
000060-33-3	9,12-Octadecadienoic acid (Z,Z)-	600	J		17.5	ug/Kg
000693-71-0	trans-13-Octadecenoic acid	1300	J		17.5	ug/Kg
021956-56-9	Benzene, 1,3-dimethoxy-5-[(1E)-2-p	300	J		18.1	ug/Kg
(6401-SVOC-T	CL BNA -20	Non-responsive	120		89 0	of 975



### Report of Analysis

Client:	Weston	Solutions				Date Collected:	12/16/	/19
Project:	R35727	7				Date Received:	12/20/	/19
Client Sample ID:	C0B38	DL				SDG No.:	K6401	1
Lab Sample ID:	K6401-	-04DL				Matrix:	SOIL	
Analytical Method:	SW827	0				% Moisture:	28.1	
Sample Wt/Vol:	30	Units:	g			Final Vol:	1000	uL
Soil Aliquot Vol:			uL			Test:	SVOC	C-TCL BNA -20
Extraction Type:				Decanted:	N	Level:	LOW	
Injection Volume:			GPC	C Factor: 1.0		GPC Cleanup:	N	PH:

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File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID	
BP001409.D	2	12/23/19 08:45	12/25/19 06:19	PB125662	

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	270 9	ZO UD	270	920	ug/Kg
108-95-2	Phenol	170	UD	170	920	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	290	UD	290	920	ug/Kg
95-57-8	2-Chlorophenol	180	UD	180	920	ug/Kg
95-48-7	2-Methylphenol	1300	D	200	920	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	250	UD	250	920	ug/Kg
98-86-2	Acetophenone	260	UD	260	920	ug/Kg
65794-96-9	3+4-Methylphenols	4900	D	270	920	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	380 🗬	O UD	380	920	ug/Kg
67-72-1	Hexachloroethane	230	UD	230	920	ug/Kg
98-95-3	Nitrobenzene	120	UD	120	920	ug/Kg
78-59-1	Isophorone	100	UD	100	920	ug/Kg
88-75-5	2-Nitrophenol	210	UD	210	920	ug/Kg
105-67-9	2,4-Dimethylphenol	2400	D	150	920	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	140	UD	140	920	ug/Kg
120-83-2	2,4-Dichlorophenol	140	UD	140	920	ug/Kg
91-20-3	Naphthalene	140	UD	140	920	ug/Kg
106-47-8	4-Chloroaniline	380	UD	380	920	ug/Kg
87-68-3	Hexachlorobutadiene	170	UD	170	920	ug/Kg
105-60-2	Caprolactam	310	UD	310	920	ug/Kg
59-50-7	4-Chloro-3-methylphenol	160	UD	160	920	ug/Kg
91-57-6	2-Methylnaphthalene	170	UD	170	920	ug/Kg
77-47-4	Hexachlorocyclopentadiene	620	UD	620	920	ug/Kg
88-06-2	2,4,6-Trichlorophenol	170	UD	170	920	ug/Kg
95-95-4	2,4,5-Trichlorophenol	160	UD	160	920	ug/Kg
92-52-4	1,1-Biphenyl	290	UD	290	920	ug/Kg
91-58-7	2-Chloronaphthalene	210	UD	210	920	ug/Kg
88-74-4	2-Nitroaniline	190	UD	190	920	ug/Kg
131-11-3	Dimethylphthalate	360	JD	140	920	ug/Kg
208-96-8	Acenaphthylene	170	UD	170	920	ug/Kg
606-20-2	2,6-Dinitrotoluene	200	UD	200	920	ug/Kg



# Report of Analysis

Client:	Weston	Solutions			Date Collected:	12/16/19	
Project:	R3572	7			Date Received:	12/20/19	
Client Sample ID:	C0B38	DL			SDG No.:	K6401	
Lab Sample ID:	K6401	-04DL			Matrix:	SOIL	
Analytical Method:	SW827	70			% Moisture:	28.1	
Sample Wt/Vol:	30	Units:	g		Final Vol:	1000	uL
Soil Aliquot Vol:			uL		Test:	SVOC-TCI	L BNA -20
Extraction Type:			Decanted	: N	Level:	LOW	
Injection Volume:			GPC Factor: 1	.0	GPC Cleanup:	N P	H:

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID	
BP001409.D	2	12/23/19 08:45	12/25/19 06:19	PB125662	
		CONTRACTOR			-

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight
99-09-2	3-Nitroaniline	-360 9Z	0 UD	360	920	ug/Kg
83-32-9	Acenaphthene	190	UD	190	920	ug/Kg
51-28-5	2,4-Dinitrophenol	240	UD	240	920	ug/Kg
100-02-7	4-Nitrophenol	180	UD	180	920	ug/Kg
132-64-9	Dibenzofuran	250	UD	250	920	ug/Kg
121-14-2	2,4-Dinitrotoluene	230	UD	230	920	ug/Kg
84-66-2	Diethylphthalate	180	UD	180	920	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	230	UD	230	920	ug/Kg
86-73-7	Fluorene	140	UD	140	920	ug/Kg
100-01-6	4-Nitroaniline	240	UD	240	920	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	190	UD	190	920	ug/Kg
86-30-6	n-Nitrosodiphenylamine	220	UD	220	920	ug/Kg
101-55-3	4-Bromophenyl-phenylether	160	UD	160	920	ug/Kg
118-74-1	Hexachlorobenzene	180	UD	180	920	ug/Kg
1912-24-9	Atrazine	220	UD	220	920	ug/Kg
87-86-5	Pentachlorophenol	300	UD	300	920	ug/Kg
85-01-8	Phenanthrene	160	UD	160	920	ug/Kg
120-12-7	Anthracene	160	UD	160	920	ug/Kg
86-74-8	Carbazole	250	UD	250	920	ug/Kg
84-74-2	Di-n-butylphthalate	270	UD	270	920	ug/Kg
206-44-0	Fluoranthene	140	UD	140	920	ug/Kg
129-00-0	Pyrene	170	UD	170	920	ug/Kg
85-68-7	Butylbenzylphthalate	180	UD	180	920	ug/Kg
91-94-1	3,3-Dichlorobenzidine	410	UD	410	920	ug/Kg
56-55-3	Benzo(a)anthracene	100	UD	100	920	ug/Kg
218-01-9	Chrysene	120	UD	120	920	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	260	UD	260	920	ug/Kg
117-84-0	Di-n-octyl phthalate	200	UD	200	920	ug/Kg
205-99-2	Benzo(b)fluoranthene	140	UD	140	920	ug/Kg
207-08-9	Benzo(k)fluoranthene	160	UD	160	920	ug/Kg
50-32-8	Benzo(a)pyrene	120	UD	120	920	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	200	UD	200	920	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	150	UD	150	920	ug/Kg
6401-SVOC-T		die	_	1.0		of 975



# Report of Analysis

Client:	Weston Solutions	Date Collected:	12/16/19
Project:	R35727	Date Received:	12/20/19
Client Sample ID:	C0B38DL	SDG No.:	K6401
Lab Sample ID:	K6401-04DL	Matrix:	SOIL
Analytical Method:	SW8270	% Moisture:	28.1
Sample Wt/Vol:	30 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	$\mathbf{u}\mathbf{L}$	Test:	SVOC-TCL BNA -20
Extraction Type:	Decanted: N	Level:	LOW
Injection Volume:	GPC Factor: 1.0	GPC Cleanup:	N PH:

File ID/Qc Batch: BP001409.D	Dilution: 2	Prep Date 12/23/19 0	08:45	Date Analyzed 12/25/19 06:19	Prep Batch PB125662	ID
CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
191-24-2	Benzo(g,h,i)perylene	170 97	UD UD	170	920	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	220	UD	220	920	ug/Kg
123-91-1	1,4-Dioxane	330	UD	330	920	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	1/20	UD	120	920	ug/Kg

13127-88-3	Phenol-d6	85.9		34 - 127	
4165-60-0	Nitrobenzene-d5	48.7		31 - 132	
321-60-8	2-Fluorobiphenyl	54.8		39 - 123	
118-79-6	2,4,6-Tribromophenol	70.6		30 - 133	
1718-51-0	Terphenyl-d14	55.9		37 - 115	
INTERNAL STA	ANDARDS				
3855-82-1	1,4-Dichlorobenzene-d4	39000	8.28		
1146-65-2	Naphthalene-d8	146000	10.32		
15067-26-2	Acenaphthene-d10	80500	13.18		
1517-22-2	Phenanthrene-d10	148000	15.58		
1719-03-5	Chrysene-d12	117000	19.23		
1520-96-3	Perylene-d12	123000	21		

81.7



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U = Not Detected

SURROGATES 367-12-4

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

2-Fluorophenol

M = MS/MSD acceptance criteria did not meet requirements

K6401-SVOC-TCL BNA -20

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

54%

57%

49%

55%

47%

56%

SPK: 150

SPK: 150

SPK: 100

SPK: 100

SPK: 150

SPK: 100



### Report of Analysis

Client:	Weston Solutions		Date Collected:	12/17/19
Project:	R35727		Date Received:	12/20/19
Client Sample ID:	C0B39		SDG No.:	K6401
Lab Sample ID:	K6401-05		Matrix:	SOIL
Analytical Method:	SW8270		% Moisture:	22.9
Sample Wt/Vol:	30.09 Units:	g	Final Vol:	1000 uL
Soil Aliquot Vol:		uL	Test:	SVOC-TCL BNA -20
Extraction Type:		Decanted: N	Level:	LOW
Injection Volume:		GPC Factor: 1.0	GPC Cleanup:	N PH:

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File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID	
					- 1
BP001375.D	1	12/23/19 08:45	12/23/19 19:08	PB125662	- 1

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
100-52-7	Benzaldehyde	130 430	U	130	430	ug/Kg
108-95-2	Phenol	110	J	81.0	430	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	130 43	U	130	430	ug/Kg
95-57-8	2-Chlorophenol	85.2 43		85.2	430	ug/Kg
95-48-7	2-Methylphenol	97.9	J	90.8	430	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	-110430	U	110	430	ug/Kg
98-86-2	Acetophenone	120	U	120	430	ug/Kg
65794-96-9	3+4-Methylphenols	130	U	130	430	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	180	U	180	430	ug/Kg
67-72-1	Hexachloroethane	110	U	110	430	ug/Kg
98-95-3	Nitrobenzene	56.0	U	56.0	430	ug/Kg
78-59-1	Isophorone	47.4	U	47.4	430	ug/Kg
88-75-5	2-Nitrophenol	98.7	U	98.7	430	ug/Kg
105-67-9	2,4-Dimethylphenol	71.4	U	71.4	430	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	66.5	U	66.5	430	ug/Kg
120-83-2	2,4-Dichlorophenol	66.3	U	66.3	430	ug/Kg
91-20-3	Naphthalene	64.3	U	64.3	430	ug/Kg
106-47-8	4-Chloroaniline	180	U	180	430	ug/Kg
87-68-3	Hexachlorobutadiene	78.6	U	78.6	430	ug/Kg
105-60-2	Caprolactam	150	U	150	430	ug/Kg
59-50-7	4-Chloro-3-methylphenol	76.5	U	76.5	430	ug/Kg
91-57-6	2-Methylnaphthalene	79.5	U	79.5	430	ug/Kg
77-47-4	Hexachlorocyclopentadiene	290	U	290	430	ug/Kg
88-06-2	2,4,6-Trichlorophenol	78.2	U	78.2	430	ug/Kg
95-95-4	2,4,5-Trichlorophenol	76.5	U	76.5	430	ug/Kg
92-52-4	1,1-Biphenyl	130	U	130	430	ug/Kg
91-58-7	2-Chloronaphthalene	97.5	U	97.5	430	ug/Kg
88-74-4	2-Nitroaniline	89.9 43	U	89.9	430	ug/Kg
131-11-3	Dimethylphthalate	330	J	65.3	430	ug/Kg
208-96-8	Acenaphthylene	-77.5430	U	77.5	430	ug/Kg
606-20-2	2,6-Dinitrotoluene	91.4 43 0	U	91.4	430	ug/Kg

K6401-SVOC-TCL BNA -20

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53-70-3

(6401-SVOC-TCL BNA -20

Dibenzo(a,h)anthracene

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### Report of Analysis

Client:	Weston Solutions	Date Collected:	12/17/19
Project:	R35727	Date Received:	12/20/19
Client Sample ID:	C0B39	SDG No.:	K6401
Lab Sample ID:	K6401-05	Matrix:	SOIL
Analytical Method:	SW8270	% Moisture:	22.9
Sample Wt/Vol:	30.09 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type:	Decanted: N	Level:	LOW
Injection Volume:	GPC Factor: 1.0	GPC Cleanup:	N PH:

File ID/Qc Batch: Dilution:		Prep Date		Date Analyzed	Prep Batch	ID
BP001375.D	1	12/23/19	08:45	12/23/19 19:08	PB125662	
CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
99-09-2	3-Nitroaniline	170 4	30 U	170	430	ug/Kg
83-32-9	Acenaphthene	87.7	U	87.7	430	ug/Kg
51-28-5	2,4-Dinitrophenol	110	U	110	430	ug/Kg
100-02-7	4-Nitrophenol	83.5	U	83.5	430	ug/Kg
132-64-9	Dibenzofuran	120	U	120	430	ug/Kg
121-14-2	2,4-Dinitrotoluene	110	U	110	430	ug/Kg
84-66-2	Diethylphthalate	81.7	U	81.7	430	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	110	U	110	430	ug/Kg
86-73-7	Fluorene	65.9	U	65.9	430	ug/Kg
100-01-6	4-Nitroaniline	110	U	110	430	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	90 3	U	90.3	430	ug/Kg
86-30-6	n-Nitrosodiphenylamine	100	U	100	430	ug/Kg
101-55-3	4-Bromophenyl-phenylether	72.9	U	72.9	430	ug/Kg
118-74-1	Hexachlorobenzene	86.0	U	86.0	430	ug/Kg
1912-24-9	Atrazine	100	U	100	430	ug/Kg
87-86-5	Pentachlorophenol	140	U	140	430	ug/Kg
85-01-8	Phenanthrene	73.8	U	73.8	430	ug/Kg
120-12-7	Anthracene	72.1	U	72.1	430	ug/Kg
86-74-8	Carbazole	120	U	120	430	ug/Kg
84-74-2	Di-n-butylphthalate	130	U	130	430	ug/Kg
206-44-0	Fluoranthene	64.0	U	64.0	430	ug/Kg
129-00-0	Pyrene	78.7	U	78.7	430	ug/Kg
85-68-7	Butylbenzylphthalate	82.5	U	82.5	430	ug/Kg
91-94-1	3,3-Dichlorobenzidine	190	U	190	430	ug/Kg
56-55-3	Benzo(a)anthracene	48.6	U	48.6	430	ug/Kg
218-01-9	Chrysene	55.0	U	55.0	430	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	120	U	120	430	ug/Kg
117-84-0	Di-n-octyl phthalate	92.2	U	92.2	430	ug/Kg
205-99-2	Benzo(b)fluoranthene	62.9	U	62.9	430	ug/Kg
207-08-9	Benzo(k)fluoranthene	72.8	U	72.8	430	ug/Kg
50-32-8	Benzo(a)pyrene	57.3	U	57.3	430	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	93.5	U	93.5	430	ug/Kg

67.6

430

ug/Kg

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### **Report of Analysis**

Client:	Weston Solutions	Date Collected:	12/17/19
Project:	R35727	Date Received:	12/20/19
Client Sample ID:	C0B39	SDG No.:	K6401
Lab Sample ID:	K6401-05	Matrix:	SOIL
Analytical Method:	SW8270	% Moisture:	22.9
Sample Wt/Vol:	30.09 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type:	Decanted: N	Level:	LOW
Injection Volume:	GPC Factor: 1.0	GPC Cleanup: N	PH:

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BP001375.D	1	12/23/19 08:45	12/23/19 19:08	PB125662

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight
191-24-2	Benzo(g,h,i)perylene	79.0 430	U	79.0	430	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	100	U	100	430	ug/Kg
123-91-1	1,4-Dioxane	150	U	150	430	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	53.8	U	53.8	430	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	93.5		28 - 127	62%	SPK: 150
13127-88-3	Phenol-d6	95.2		34 - 127	63%	SPK: 150
4165-60-0	Nitrobenzene-d5	59.7		31 - 132	60%	SPK: 100
321-60-8	2-Fluorobiphenyl	61.2		39 - 123	61%	SPK: 100
118-79-6	2,4,6-Tribromophenol	89.0		30 - 133	59%	SPK: 150
1718-51-0	Terphenyl-d14	67.5		37 - 115	68%	SPK: 100
INTERNAL STA	ANDARDS					
3855-82-1	1,4-Dichlorobenzene-d4	55000	8.3			
1146-65-2	Naphthalene-d8	191000	10.33			
15067-26-2	Acenaphthene-d10	112000	13.2			
1517-22-2	Phenanthrene-d10	209000	15.6			
1719-03-5	Chrysene-d12	155000	19.25			
1520-96-3	Perylene-d12	162000	21.03			
TENTATIVE ID	ENTIFIED COMPOUNDS					
000123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	650	AB		5.62	ug/Kg
	unknown7.94	3200	J		7.94	ug/Kg
000057-10-3	n-Hexadecanoic acid	120	J		16.5	ug/Kg
015594-90-8	1-Heneicosanol	220	J		19.1	ug/Kg
000593-49-7	Heptacosane	100	J		20.7	ug/Kg
054833-23-7	Eicosane, 10-methyl-	120	J		21.1	ug/Kg
000112-95-8	Eicosane	91.0	JB		21.6	ug/Kg





# Report of Analysis

Client:	Weston Solutions	Date Collected: 12/17/19
Chent.	weston Solutions	Date Collected: 12/17/19
Project:	R35727	Date Received: 12/20/19
Client Sample ID:	C0B40	SDG No.: K6401
Lab Sample ID:	K6401-06	Matrix: SOIL
Analytical Method:	SW8270	% Moisture: 27.9
Sample Wt/Vol:	30.06 Units: g	Final Vol: 1000 uL
Soil Aliquot Vol:	uL	Test: SVOC-TCL BNA -20
Extraction Type:	Decanted: N	Level: LOW
Injection Volume:	GPC Factor: 1.0	GPC Cleanup: N PH:

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File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID	
BP001400.D	1	12/23/19 08:45	12/24/19 22:04	PB125662	

DF001400.D		12/23/190	0. <b>4</b> .)	12/24/19 22:04	PB123002	
CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight
TARGETS						
100-52-7	Benzaldehyde	150	J	140	460	ug/Kg
108-95-2	Phenol	86.8 4		86.8	460	ug/Kg
111-44-4	bis(2-Chloroethyl)ether	140	U	140	460	ug/Kg
95-57-8	2-Chlorophenol	91.2	U	91.2	460	ug/Kg
95-48-7	2-Methylphenol	110	J	97.2	460	ug/Kg
108-60-1	2,2-oxybis(1-Chloropropane)	120-46		120	460	ug/Kg
98-86-2	Acetophenone	130-40	e <sup>0</sup> U	130	460	ug/Kg
65794-96-9	3+4-Methylphenols	1000		140	460	ug/Kg
621-64-7	n-Nitroso-di-n-propylamine	t90 4	OU	190	460	ug/Kg
67-72-1	Hexachloroethane	120	U	120	460	ug/Kg
98-95-3	Nitrobenzene	60.0	U	60.0	460	ug/Kg
78-59-1	Isophorone	_50.7	JU VI	50.7	460	ug/Kg
88-75-5	2-Nitrophenol	110-	U	110	460	ug/Kg
105-67-9	2,4-Dimethylphenol	1200		76.4	460	ug/Kg
111-91-1	bis(2-Chloroethoxy)methane	71,2 4	60 U	71.2	460	ug/Kg
120-83-2	2,4-Dichlorophenol	71.0	U	71.0	460	ug/Kg
91-20-3	Naphthalene	68.9	U	68.9	460	ug/Kg
106-47-8	4-Chloroaniline	190	U	190	460	ug/Kg
87-68-3	Hexachlorobutadiene	84.1	U	84.1	460	ug/Kg
105-60-2	Caprolactam	160	U	160	460	ug/Kg
59-50-7	4-Chloro-3-methylphenol	81.9	U	81.9	460	ug/Kg
91-57-6	2-Methylnaphthalene	85.1	U	85.1	460	ug/Kg
77-47-4	Hexachlorocyclopentadiene	310	U	310	460	ug/Kg
88-06-2	2,4,6-Trichlorophenol	83.7	U	83.7	460	ug/Kg
95-95-4	2,4,5-Trichlorophenol	81.9	U	81.9	460	ug/Kg
92-52-4	1,1-Biphenyl	140	U	140	460	ug/Kg
91-58-7	2-Chloronaphthalene	100	U	100	460	ug/Kg
88-74-4	2-Nitroaniline	96.2	U	96.2	460	ug/Kg
131-11-3	Dimethylphthalate	540		69.9	460	ug/Kg
208-96-8	Acenaphthylene	83.0 4	OO U	83.0	460	ug/Kg
606-20-2	2,6-Dinitrotoluene	97.8		97.8	460	ug/Kg

Client:	Weston S	Solutions				Date Collected:		12/17/19		
Project:	R35727					Date Received:		12/20/19		
Client Sample ID:	C0B40					SDG No.:		K6401		
Lab Sample ID:	K6401-0	6				Matrix:		SOIL		
Analytical Method:	SW8270					% Moisture:		27.9		
Sample Wt/Vol:	30.06	Units:	g			Final Vol:		1000	uL	
Soil Aliquot Vol:			uL			Test:		SVOC-TO	CL BNA -20	
Extraction Type:				Decanted:	N	Level:		LOW		
Injection Volume:			GPC	Factor: 1.0		GPC Cleanup:	N		PH:	

File ID/Qc Batch: Dilution:		Prep Date	;	Date Analyzed	Prep Batch	ID
BP001400.D	1	1 12/23/19		19 08:45 12/24/19 22:04		
CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weigh
99-09-2	3-Nitroaniline	180 4	60 U	180	460	ug/Kg
83-32-9	Acenaphthene	93.9	U	93.9	460	ug/Kg
51-28-5	2,4-Dinitrophenol	120	U	120	460	ug/Kg
100-02-7	4-Nitrophenol	89 4	U	89.4	460	ug/Kg
132-64-9	Dibenzofuran	120	U	120	460	ug/Kg
121-14-2	2,4-Dinitrotoluene	120	U	120	460	ug/Kg
84-66-2	Diethylphthalate	87.5	U	87.5	460	ug/Kg
7005-72-3	4-Chlorophenyl-phenylether	120	U	120	460	ug/Kg
86-73-7	Fluorene	70.5	U	70.5	460	ug/Kg
100-01-6	4-Nitroaniline	120	U	120	460	ug/Kg
534-52-1	4,6-Dinitro-2-methylphenol	96.6	U	96.6	460	ug/Kg
86-30-6	n-Nitrosodiphenylamine	110	U	110	460	ug/Kg
101-55-3	4-Bromophenyl-phenylether	78.1	U	78.1	460	ug/Kg
118-74-1	Hexachlorobenzene	92.1	U	92.1	460	ug/Kg
1912-24-9	Atrazine	110	U	110	460	ug/Kg
87-86-5	Pentachlorophenol	150	U	150	460	ug/Kg
85-01-8	Phenanthrene	79.0	U	79.0	460	ug/Kg
120-12-7	Anthracene	77.2	U	77.2	460	ug/Kg
86-74-8	Carbazole	120	U	120	460	ug/Kg
84-74-2	Di-n-butylphthalate	140	U	140	460	ug/Kg
206-44-0	Fluoranthene	68.5	U	68.5	460	ug/Kg
129-00-0	Pyrene	84.3	U	84.3	460	ug/Kg
85-68-7	Butylbenzylphthalate	88.3	U	88.3	460	ug/Kg
91-94-1	3,3-Dichlorobenzidine	200	U	200	460	ug/Kg
56-55-3	Benzo(a)anthracene	52 0	U	52.0	460	ug/Kg
218-01-9	Chrysene	58.9	U	58.9	460	ug/Kg
117-81-7	Bis(2-ethylhexyl)phthalate	130	U	130	460	ug/Kg
117-84-0	Di-n-octyl phthalate	98.7	U	98.7	460	ug/Kg
205-99-2	Benzo(b)fluoranthene	67.3	U	67.3	460	ug/Kg
207-08-9	Benzo(k)fluoranthene	78.0	U	78.0	460	ug/Kg
50-32-8	Benzo(a)pyrene	61.4	U	61.4	460	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	100	U	100	460	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	724	U U	72.4	460	ug/Kg
6401-SVOC-TCI		1	Non-responsive ba	1	161	of 975



#### Report of Analysis

Client:	Weston Solutions	Date Collected:	12/17/19
Project:	R35727	Date Received:	12/20/19
Client Sample ID:	C0B40	SDG No.:	K6401
Lab Sample ID:	K6401-06	Matrix:	SOIL
Analytical Method:	SW8270	% Moisture:	27.9
Sample Wt/Vol:	30.06 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-TCL BNA -20
Extraction Type:	Decanted: N	Level:	LOW
Injection Volume:	GPC Factor: 1.0	GPC Cleanup:	N PH:

File ID/Qc Batch: BP001400.D	Dilution: 1	Prep Date 12/23/19 (		Date Analyzed 12/24/19 22:04	Prep Batch PB125662	ID
CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight
191-24-2	Benzo(g,h,i)perylene	44.6 4	vo U	84.6	460	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	110	U	110	460	ug/Kg
123-91-1	1,4-Dioxane	160	U	160	460	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	57.6	U	57.6	460	ug/Kg

123-91-1	1,4-Dioxane	160	U	160	460	ug/Kg
58-90-2	2,3,4,6-Tetrachlorophenol	57.6	U	57.6	460	ug/Kg
SURROGATES						
367-12-4	2-Fluorophenol	84.3		28 - 127	56%	SPK: 150
13127-88-3	Phenol-d6	83.4		34 - 127	56%	SPK: 150
4165-60-0	Nitrobenzene-d5	49.8		31 - 132	50%	SPK: 100
321-60-8	2-Fluorobiphenyl	62.3		39 - 123	62%	SPK: 100
118-79-6	2,4,6-Tribromophenol	87.2		30 - 133	58%	SPK: 150
1718-51-0	Terphenyl-d14	60.0		37 - 115	60%	SPK: 100
INTERNAL ST	ANDARDS					

2,4,6-Tribromophenol	87.2		30 - 133	58%	SPK: 150
Terphenyl-d14	60.0		37 - 115	60%	SPK: 100
NDARDS					
1,4-Dichlorobenzene-d4	52200	8.32			
Naphthalene-d8	187000	10.33			
Acenaphthene-d10	84700	13.19			
Phenanthrene-d10	163000	15.6			
Chrysene-d12	124000	19.23			
Perylene-d12	128000	21.02			
ENTIFIED COMPOUNDS					
1,3-Dichlorobenzene	31600	J		8.23	ug/Kg
1,4-Dichlorobenzene	46800	J		8.36	ug/Kg
1,2-Dichlorobenzene	90400	J		8.63	ug/Kg
1,2,4-Trichlorobenzene	4500	J		10.3	ug/Kg
Phenol, 2-ethyl-4-methyl-	2700	J		11.0	ug/Kg
unknown12.23	3600	J		12.2	ug/Kg
Isobutyl 2-methylpentyl carbonate	3000	J		12.6	ug/Kg
Benzenamine, N-propyl-	26100	J		13.5	ug/Kg
1-Tetradecene	4100	J		13.8	ug/Kg
Acetic acid, trichloro-, nonyl est	5700	J		13.9	ug/Kg
2- Chloropropionic acid, decyl est	2600	J		14.1	ug/Kg
1-Heptanol, 2,4-dimethyl-, (R,R)-(	6900	J		14.2	ug/Kg
unknown14.26	4400	J		14.3	ug/Kg
	Terphenyl-d14  ANDARDS  1,4-Dichlorobenzene-d4  Naphthalene-d8  Acenaphthene-d10  Phenanthrene-d10  Chrysene-d12  Perylene-d12  ENTIFIED COMPOUNDS  1,3-Dichlorobenzene  1,4-Dichlorobenzene  1,2-Dichlorobenzene  1,2-Trichlorobenzene  Phenol, 2-ethyl-4-methyl- unknown12.23  Isobutyl 2-methylpentyl carbonate  Benzenamine, N-propyl- 1-Tetradecene  Acetic acid, trichloro-, nonyl est  2- Chloropropionic acid, decyl est 1-Heptanol, 2,4-dimethyl-, (R,R)-(	Terphenyl-d14 60.0  ANDARDS  1,4-Dichlorobenzene-d4 52200  Naphthalene-d8 187000  Acenaphthene-d10 84700  Phenanthrene-d10 163000  Chrysene-d12 124000  Perylene-d12 128000  ENTIFIED COMPOUNDS  1,3-Dichlorobenzene 31600  1,4-Dichlorobenzene 46800  1,2-Dichlorobenzene 90400  1,2,4-Trichlorobenzene 4500  Phenol, 2-ethyl-4-methyl- 2700  unknown12.23 3600  Isobutyl 2-methylpentyl carbonate Benzenamine, N-propyl- 26100  1-Tetradecene 4100  Acetic acid, trichloro-, nonyl est 5700  2- Chloropropionic acid, decyl est 1-Heptanol, 2,4-dimethyl-, (R,R)-(6900)	Terphenyl-d14 60.0  ANDARDS  1,4-Dichlorobenzene-d4 52200 8.32  Naphthalene-d8 187000 10.33  Acenaphthene-d10 84700 13.19  Phenanthrene-d10 163000 15.6  Chrysene-d12 124000 19.23  Perylene-d12 128000 21.02  ENTIFIED COMPOUNDS  1,3-Dichlorobenzene 31600 J  1,4-Dichlorobenzene 46800 J  1,2-Dichlorobenzene 90400 J  1,2,4-Trichlorobenzene 4500 J  Phenol, 2-ethyl-4-methyl- 2700 J  unknown12.23 3600 J  Isobutyl 2-methylpentyl carbonate 3000 J  Benzenamine, N-propyl- 26100 J  1-Tetradecene 4100 J  Acetic acid, trichloro-, nonyl est 5700 J  2- Chloropropionic acid, decyl est 2600 J  1-Heptanol, 2,4-dimethyl-, (R,R)-(6900 J	Terphenyl-d14 60.0 37 - 115  ANDARDS  1,4-Dichlorobenzene-d4 52200 8.32  Naphthalene-d8 187000 10.33  Acenaphthene-d10 84700 13.19  Phenanthrene-d10 163000 15.6  Chrysene-d12 124000 19.23  Perylene-d12 128000 21.02  ENTIFIED COMPOUNDS  1,3-Dichlorobenzene 31600 J  1,4-Dichlorobenzene 46800 J  1,2-Dichlorobenzene 90400 J  1,2,4-Trichlorobenzene 4500 J  Phenol, 2-ethyl-4-methyl- 2700 J  unknown12.23 3600 J  Isobutyl 2-methylpentyl carbonate 3000 J  Benzenamine, N-propyl- 26100 J  1-Tetradecene 4100 J  Acetic acid, trichloro-, nonyl est 5700 J  2- Chloropropionic acid, decyl est 2600 J  1-Heptanol, 2,4-dimethyl-, (R,R)-(6900 J	Terphenyl-d14 60.0 37 - 115 60%  ANDARDS  1,4-Dichlorobenzene-d4 52200 8.32  Naphthalene-d8 187000 10.33  Acenaphthene-d10 84700 13.19  Phenanthrene-d10 163000 15.6  Chrysene-d12 124000 19.23  Perylene-d12 128000 21.02  ENTIFIED COMPOUNDS  1,3-Dichlorobenzene 31600 J 8.36  1,2-Dichlorobenzene 46800 J 8.36  1,2-Dichlorobenzene 90400 J 8.63  1,2,4-Trichlorobenzene 4500 J 10.3  Phenol, 2-ethyl-4-methyl- 2700 J 11.0  unknown12.23 3600 J 12.2  Isobutyl 2-methylpentyl carbonate 3000 J 12.6  Benzenamine, N-propyl- 26100 J 13.5  1-Tetradecene 4100 J 13.8  Acetic acid, trichloro-, nonyl est 5700 J 13.9  2- Chloropropionic acid, decyl est 2600 J 14.1  1-Heptanol, 2,4-dimethyl-, (R,R)-(6900 J 14.2

K6401-SVOC-TCL BNA -20

4/2/20

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PL055187.D

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284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

#### Report of Analysis

File ID/Qc Batch:	Dilution:	X	Prep Date	Date Analyzed	Pre	ep Batch ID
GPC Factor:	1.0	PH:				
Extraction Type:				Injection Volume:		
Soil Aliquot Vol:		$\mathbf{u}$ L		Test:	Pesticide-T	CL
Sample Wt/Vol:	30.03 Un	its: g		Final Vol:	10000	uL
Analytical Method:	SW8081			% Moisture:	24.9	Decanted:
Lab Sample ID:	K6401-01			Matrix:	SOIL	
Client Sample ID:	C0B37			SDG No.:	K6401	
Project:	R35727			Date Received:	12/20/19	
Client:	Weston Solution	ons		Date Collected:	12/16/19	

12/23/19 17:08

PB125661

12/23/19 08:18

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
319-84-6	alpha-BHC	7.20	PJ	0.43	2.30	ug/kg
319-85-7	beta-BHC	_0.63 2	30 U	0.63	2.30	ug/kg
319-86-8	delta-BHC	0.81	U	0.81	2.30	ug/kg
58-89-9	gamma-BHC (Lindane)	1.10	U	1.10	2.30	ug/kg
76-44-8	Heptachlor	0.35	U	0.35	2.30	ug/kg
309-00-2	Aldrin	.0.25	U	0.25	2.30	ug/kg
1024-57-3	Heptachlor epoxide	0.34	U	0.34	2.30	ug/kg
959-98-8	Endosulfan I	0.20	U	0.20	2.30	ug/kg
60-57-1	Dieldrin	0.21	U	0.21	2.30	ug/kg
72-55-9	4,4-DDE	8.50	5	0.24	2.30	ug/kg
72-20-8	Endrin	-0.252.3	U	0.25	2.30	ug/kg
33213-65-9	Endosulfan II	0.63 2	30 U	0.63	2.30	ug/kg
72-54-8	4,4-DDD	340	E	0.20	2.30	ug/kg
1031-07-8	Endosulfan Sulfate	0.29 2	30U	0.29	2.30	ug/kg
50-29-3	4,4-DDT	32.8	PJ	0.21	2.30	ug/kg
72-43-5	Methoxychlor	-0.582	30 U	0.58	2.30	ug/kg
53494-70-5	Endrin ketone	0.28	U	0.28	2.30	ug/kg
7421-93-4	Endrin aldehyde	-0.27	U	0.27	2.30	ug/kg
5103-71-9	alpha-Chlordane	0.25	U	0.25	2.30	ug/kg
5103-74-2	gamma-Chlordane	0.29	U	0.29	2.30	ug/kg
8001-35-2	Toxaphene	4.40	U	4.40	22.6	ug/kg
SURROGATES						
2051-24-3	Decachlorobiphenyl	14.6		10 - 169	73%	SPK: 20
877-09-8	Tetrachloro-m-xylene	63.7	*	31 - 151	318%	SPK: 20





## Report of Analysis

File ID/Qc Batch:	Dilution:	# CO. C.	Prep Date	Date Analyzed	Dec	ep Batch ID
GPC Factor:	1.0	PH:	NAME AND ADDRESS OF THE PARTY.		AT MATERIAL PROPERTY AND ADDRESS OF THE AT	
Extraction Type:				Injection Volume:		
Soil Aliquot Vol:		uL		Test:	Pesticide-T	CL
Sample Wt/Vol:	30.03 Ui	nits: g		Final Vol:	10000	uL
Analytical Method:	SW8081			% Moisture:	24.9	Decanted:
Lab Sample ID:	K6401-01DL			Matrix:	SOIL	
Client Sample ID:	C0B37DL			SDG No.:	K6401	
Project:	R35727			Date Received:	12/20/19	
Client:	Weston Soluti	ions		Date Collected:	12/16/19	

PL055206.D 10				PB125661			
CAS Number	Parameter	Conc.	Qualifier	MDL		LOQ / CRQL	Units(Dry Weight)
TARGETS							
319-84-6	alpha-BHC	8.50 22	6 JD	4.30		22.6	ug/kg
319-85-7	beta-BHC	6.30	UD	6.30		22.6	ug/kg
319-86-8	delta-BHC	8.10	UD	8.10		22.6	ug/kg
58-89-9	gamma-BHC (Lindane)	10.6	UD	10.6		22.6	ug/kg
76-44-8	Heptachlor	3.50	UD	3.50		22.6	ug/kg
309-00-2	Aldrin	2.50	UD	2.50		22.6	ug/kg

TARGETS								
319-84-6	alpha-BHC	8.50	226 JD	4.30		22.6	ug/kg	
319-85-7	beta-BHC	6.30		6.30		22.6	ug/kg	
319-86-8	delta-BHC	8.10		8.10		22.6	ug/kg	
58-89-9	gamma-BHC (Lindane)	10.6		10.6		22.6	ug/kg	
76-44-8	Heptachlor	3.50	UD	3.50		22.6	ug/kg	
309-00-2	Aldrin	2.50	UD	2.50		22.6	ug/kg	
1024-57-3	Heptachlor epoxide	3.40	UD	3.40		22.6	ug/kg	
959-98-8	Endosulfan I	2.00	UD	2.00		22.6	ug/kg	
60-57-1	Dieldrin	2.10	UD	2.10		22.6	ug/kg	
72-55-9	4,4-DDE	10.9		2.40		22.6	ug/kg	
72-20-8	Endrin	2.50		2.50		22.6	ug/kg	
33213-65-9	Endosulfan II	6.30	0.00	6.30		22.6	ug/kg	
72-54-8	4,4-DDD	370	DJ	2.00		22.6	ug/kg	
1031-07-8	Endosulfan Sulfate	2.90	22. FUD	2.90		22.6	ug/kg	
50-29-3	4,4-DDT	37.8		2.10		22.6	ug/kg	
72-43-5	Methoxychlor	5.80		5.80		22.6	ug/kg	
53494-70-5	Endrin ketone	2.80	UD	2.80		22.6	ug/kg	
7421-93-4	Endrin aldehyde	2.70	UD	2.70		22.6	ug/kg	
5103-71-9	alpha-Chlordane	2.50	UD	2.50		22.6	ug/kg	
5103-74-2	gamma-Chlordane	2.90	UD	2.90		22.6	ug/kg	
8001-35-2	Toxaphene	44.3	/ UD	44.3		230	ug/kg	
SURROGATES								
2051-24-3	Decachlorobiphenyl	24.4		10 - 169		122%	SPK: 20	
877-09-8	Tetrachloro-m-xylene	78.0	*	31 - 151	(	390%	SPK: 20	





PL055190.D

284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

## Report of Analysis

ile ID/Qc Batch:	Dilution:		Prep Date	Date Analyzed	Pro	ep Batch ID
GPC Factor:	1.0	PH:				
Extraction Type:				Injection Volume :		
Soil Aliquot Vol:		uL		Test:	Pesticide-T	CL
Sample Wt/Vol:	30.02 Ui	nits: g		Final Vol:	10000	uL
Analytical Method:	SW8081			% Moisture:	28.1	Decanted:
Lab Sample ID:	K6401-04			Matrix:	SOIL	
Client Sample ID:	C0B38			SDG No.:	K6401	
Project:	R35727			Date Received:	12/20/19	
Client:	Weston Soluti	ions		Date Collected:	12/16/19	

12/23/19 17:50

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12/23/19 08:18

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CAS Number	Parameter	Conc.	Qualifier	MDL	LoQ	/ CRQL	Units(Dry Weight)
TARGETS							
319-84-6	alpha-BHC	0.45 2	40 U	0.45		2.40	ug/kg
319-85-7	beta-BHC	0.66	U	0.66		2.40	ug/kg
319-86-8	delta-BHC	0.85	U	0.85		2.40	ug/kg
58-89-9	gamma-BHC (Lindane)	1.10	U	1.10		2.40	ug/kg
76-44-8	Heptachlor	0.37	U	0.37		2.40	ug/kg
309-00-2	Aldrin	0.27	U	0.27		2.40	ug/kg
1024-57-3	Heptachlor epoxide	0.35	U	0.35		2.40	ug/kg
959-98-8	Endosulfan I	0.21	U	0.21		2.40	ug/kg
60-57-1	Dieldrin	0.22	U	0.22		2.40	ug/kg
72-55-9	4,4-DDE	0.77	JP J	0.25		2.40	ug/kg
72-20-8	Endrin	0.26 2	do II	0.26		2.40	ug/kg
33213-65-9	Endosulfan II	0.66	U	0.66		2.40	ug/kg
72-54-8	4,4-DDD	2.40	P5	0.21		2.40	ug/kg
1031-07-8	Endosulfan Sulfate	D.30 2,	οÚ	0.30		2.40	ug/kg
50-29-3	4,4-DDT	1.80	JP J	0.21		2.40	ug/kg
72-43-5	Methoxychlor	0.612	0 U	0.61		2.40	ug/kg
53494-70-5	Endrin ketone	0.29	U	0.29		2.40	ug/kg
7421-93-4	Endrin aldehyde	0.28	U	0.28		2.40	ug/kg
5103-71-9	alpha-Chlordane	0.26	U	0.26		2.40	ug/kg
5103-74-2	gamma-Chlordane	0.30	U	0.30		2.40	ug/kg
8001-35-2	Toxaphene	4.60	U	4.60		23.6	ug/kg

8.22

11.2

10 - 169

31 - 151



2051-24-3

877-09-8

SURROGATES

Decachlorobiphenyl

Tetrachloro-m-xylene

41%

56%

SPK: 20

SPK: 20



PL055191.D

284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

## Report of Analysis

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Pre	p Batch ID
GPC Factor:	1.0	PH:	NAMES OF THE PERSON OF THE PER	NASSANASAKSI KONSSINASISINA	ORDER DE LA CONTRACTION DE LA
Extraction Type:			Injection Volume:		
Soil Aliquot Vol:		uL	Test:	Pesticide-To	CL
Sample Wt/Vol:	30.07 Units	s: g	Final Vol:	10000	<b>u</b> L
Analytical Method:	SW8081		% Moisture:	22.9	Decanted:
_ab Sample ID:	K6401-05		Matrix:	SOIL	
Client Sample ID:	C0B39		SDG No.:	K6401	
Project:	R35727		Date Received:	12/20/19	
Client:	Weston Solution	S	Date Collected:	12/17/19	

12/23/19 18:04

PB125661

12/23/19 08:18

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
319-84-6	alpha-BHC	0.42 2.20	U	0.42	2.20	ug/kg
319-85-7	beta-BHC	0.61	U	0.61	2.20	ug/kg
319-86-8	delta-BHC	0.79	U	0.79	2.20	ug/kg
58-89-9	gamma-BHC (Lindane)	1.00	U	1.00	2.20	ug/kg
76-44-8	Heptachlor	0.34	U	0.34	2.20	ug/kg
309-00-2	Aldrin	0.25	U	0.25	2.20	ug/kg
1024-57-3	Heptachlor epoxide	0.33	U	0.33	2.20	ug/kg
959-98-8	Endosulfan I	0.19	U	0.19	2.20	ug/kg
60-57-1	Dieldrin	0.21	U	0.21	2.20	ug/kg
72-55-9	4,4-DDE	0.23	U	0.23	2.20	ug/kg
72-20-8	Endrin	0.24	U	0.24	2.20	ug/kg
33213-65-9	Endosulfan II	0.61	U	0.61	2.20	ug/kg
72-54-8	4,4-DDD	0.20	U	0.20	2.20	ug/kg
1031-07-8	Endosulfan Sulfate	0.28	U	0.28	2.20	ug/kg
50-29-3	4,4-DDT	0.20	U	0.20	2.20	ug/kg
72-43-5	Methoxychlor	0.57	U	0.57	2.20	ug/kg
53494-70-5	Endrin ketone	0.27	U	0.27	2.20	ug/kg
7421-93-4	Endrin aldehyde	0.26	U	0.26	2.20	ug/kg
5103-71-9	alpha-Chlordane	0.24	U	0.24	2.20	ug/kg
5103-74-2	gamma-Chlordane	0.28	U	0.28	2.20	ug/kg
8001-35-2	Toxaphene	4.30	U	4.30	22.0	ug/kg
SURROGATES						
2051-24-3	Decachlorobiphenyl	13.3		10 - 169	67%	SPK: 20
877-09-8	Tetrachloro-m-xylene	17.9		31 - 151	90%	SPK: 20





## Report of Analysis

				Charles and Control of			
Client:	Weston Solutions				Date Collected:	12/17/19	
Project:	R35727				Date Received:	12/20/19	
Client Sample ID:	C0B40				SDG No.:	K6401	
Lab Sample ID:	K6401-06				Matrix:	SOIL	
Analytical Method	: SW8081				% Moisture:	27.9 Dec	canted:
Sample Wt/Vol:	30.09 Units:	g			Final Vol:	10000	uL
Soil Aliquot Vol:		uL			Test:	Pesticide-TCL	
Extraction Type:					Injection Volume:		
GPC Factor :	1.0	PH:		SEPTOMATICAL COLUMN		Kommunity service and discuss states	water a series of
File ID/Qc Batch:	Dilution:	Prep I	Date	THE PERSON NAMED IN	Date Analyzed	Prep Batc	h ID -
PL055192.D	1	12/23/	19 08:18	Challenge College	12/23/19 18:18	PB125661	WARE THO WARE THE CONTROL OF
AS Number	Parameter	Conc.	Qualifier	MDL		LOQ / CRQL	Units(Dry Weight
TARGETS							
319-84-6	alpha-BHC	0.43 2.41	U	0.45		2.40	ug/kg
319-85-7	beta-BHC	-0.65	U	0.65		2.40	ug/kg
319-86-8	delta-BHC	0.85	U	0.85		2.40	ug/kg
58-89-9	gamma-BHC (Lindane)	1.10	U	1.10		2.40	ug/kg
76-44-8	Heptachlor	0.36	U	0.36		2.40	ug/kg
309-00-2	Aldrin	0.26	U	0.26		2.40	ug/kg
1024-57-3	Heptachlor epoxide	0.35	U	0.35		2.40	ug/kg
050 00 0	C . 1 16 T	0.01	TT	0.21		2.10	

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight
TARGETS						
319-84-6	alpha-BHC	0.43 2.40	U	0.45	2.40	ug/kg
319-85-7	beta-BHC	0.65	U	0.65	2.40	ug/kg
319-86-8	delta-BHC	0.85	U	0.85	2.40	ug/kg
58-89-9	gamma-BHC (Lindane)	1.10	U	1.10	2.40	ug/kg
76-44-8	Heptachlor	0.36	U	0.36	2.40	ug/kg
309-00-2	Aldrin	0.26	U	0.26	2.40	ug/kg
1024-57-3	Heptachlor epoxide	0.35	U	0.35	2.40	ug/kg
959-98-8	Endosulfan I	0.21	U	0.21	2.40	ug/kg
60-57-1	Dieldrin	0.22	U	0.22	2.40	ug/kg
72-55-9	4,4-DDE	4.40		0.25	2.40	ug/kg
72-20-8	Endrin	0.26 2,40	U	0.26	2.40	ug/kg
33213-65-9	Endosulfan II	0.65	U	0.65	2.40	ug/kg
72-54-8	4,4-DDD	20.7		0.21	2.40	ug/kg
1031-07-8	Endosulfan Sulfate	0.30-2.40	U	0.30	2.40	ug/kg
50-29-3	4,4-DDT	11.9		0.21	2.40	ug/kg
72-43-5	Methoxychlor	0.61-2.40	U	0.61	2.40	ug/kg
53494-70-5	Endrin ketone	4.30		0.29	2.40	ug/kg
7421-93-4	Endrin aldehyde	2.28 2.40	U	0.28	2.40	ug/kg
5103-71-9	alpha-Chlordane	0.26	U	0.26	2.40	ug/kg
5103-74-2	gamma-Chlordane	0.30	U	0.30	2.40	ug/kg
8001-35-2	Toxaphene	4.60	U	4.60	23.5	ug/kg
SURROGATES						
2051-24-3	Decachlorobiphenyl	8.38		10 - 169	42%	SPK: 20
877-09-8	Tetrachloro-m-xylene	7.71		31 - 151	39%	SPK: 20



#### **CASE NARRATIVE**

Weston Solutions Project Name: R35727

Project # N/A

Chemtech Project # K6401 Test Name: VOC-TCLVOA-10

## A. Number of Samples and Date of Receipt:

6 Solid samples were received on 12/20/2019. 1 Water sample was received on 12/20/2019.

#### **B.** Parameters

According to the Chain of Custody document, the following analyses were requested: Pesticide-TCL, SVOC-TCL BNA -20, VOC-TCLVOA-10 and VOC-TCLVOA-10. This data package contains results for VOC-TCLVOA-10.

#### C. Analytical Techniques:

The analysis performed on instrument MSVOA\_D were done using GC column RTX-VMS which is 20 meters, 0.18 mm id, 1.0 um df, Restek Cat. #49914. The Trap was supplied by SUPELCO, K (VOACARB 3000), TEKMAR LSC-2000 Concentrator. The analysis performed on instrument MSVOA\_X were done using GC column DB-624UI 20m 0.18mm 1.0 um. Cat#121-1324UIThe analysis of VOC-TCLVOA-10 was based on method 8260C.

## D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

The Internal Standards Areas met the acceptable requirements.

The Retention Times were acceptable for all samples.

The RPD for {VX1223WBSD01} with File ID: VX014200.D met criteria except for Tetrachloroethene[22%].

The Blank Spike met requirements for all samples.

The Blank Spike Duplicate met requirements for all samples.

The Blank analysis did not indicate the presence of lab contamination.

The % RSD is greater than 15% in the Initial Calibration method (82D122419W.M) for Acetone this compound is passing on Quadratic Regression and Methylene Chloride this compound is passing on Linear Regression .

The % RSD is greater than 15% in the Initial Calibration method (82X121319W.M) for Carbon Disulfide, Bromochloromethane thise compounds are passing on Linear Regression.

K6401 4 of 80



The Continuous Calibration met the requirements.

The Tuning criteria met requirements.

Samples C0B37, C0B38 and C0B40 were run directly in methanol with dilution due to sample have organic smell and high PID readings.

#### E. Additional Comments:

Both water and soils are for 7 day TAT as per conversation with client.

Samples for MS/MSD for VOC analysis were not provided with this set of samples. The Blank Spike Duplicate is reported with the data.

#### F. Calculation:

Water Calculation in  $ug/L = (A \times )(I \times )(Df)$ (Ais)(RRF)(V0)

Where,

Ax = Area for the compound to be measured

Ais = Area for the specific internal standard

Is = Amount of internal standard added in nanograms (ng)

RRF = Relative response factor of the initial calibration curve standard.

Vo = Volume of water purged in milliliters (mL)

Df = Dilution factor.

**Low Level Soil Calculation** in ug/Kg dry weight basis =  $(A \times )(I \times )$ (Ais) (RRF)(Ws)(D)

Where,

Ax = Area for the compound to be measured

Ais = Area for the specific internal standard

Is = Amount of internal standard added in nanograms (ng)

RRF = Relative response factor of the initial calibration curve standard.

Df = Dilution factor

Ws= Weight of sample

D= 100 - %moisture

100

# **High Level Soil Calculation** in ug/Kg dry weight basis = $(A \times )(I \times )$ (Vt) 1000 (Df) (Ais) (RRF)(Va)(Ws)(D)

Where,

Ax = Area for the compound to be measured

Ais = Area for the specific internal standard

Is = Amount of internal standard added in nanograms (ng)

RRF = Relative response factor of the initial calibration standard.

Vt = Total volume of methanol extract in milliliters (mL), (usually 10 mL)

Va = Volume of aliquot in microliters (uL) (usually 100 uL)

K6401 5 of 80



Df = Dilution factor Ws= Weight of sample  $D = \frac{100 - \%\text{moisture}}{100}$ 

Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <15% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 15% for the Initial Calibration curve for SW-846 analysis.

#### **G.** Manual Integration Comments:

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.



K6401 6 of 80



#### **CASE NARRATIVE**

Weston Solutions Project Name: R35727

Project # N/A

Chemtech Project # K6401

**Test Name: SVOC-TCL BNA -20** 

## A. Number of Samples and Date of Receipt:

6 Solid samples were received on 12/20/2019. 1 Water sample was received on 12/20/2019.

#### **B.** Parameters

According to the Chain of Custody document, the following analyses were requested: Pesticide-TCL, SVOC-TCL BNA -20, VOC-TCLVOA-10 and VOC-TCLVOA-10. This data package contains results for SVOC-TCL BNA -20.

#### C. Analytical Techniques:

The samples were analyzed on instrument BNA\_P using GC Column DB-UI 8270D which is 20 meters, 0.18 mm ID, 0.36 um dfThe analysis of SVOC-TCL BNA -20 was based on method 8270D and extraction was done based on method 3541.

#### D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

The Internal Standards Areas met the acceptable requirements.

The Retention Times were acceptable for all samples.

The Blank Spike met requirements for all samples.

The Blank analysis did not indicate the presence of lab contamination.

The Initial Calibration met the requirements.

The Continuous Calibration File ID BP001384.D met the requirements except for Isophorone is failing marginally low and 2,4,6-Tribromophenol is failing high but no hit in any samples so no corrective action required.

The Continuous Calibration File ID BP001408.D met the requirements except for 1,4-Dioxane,2,4-Dinitrophenol,4,6-Dinitro-2-methylphenol, 4-Nitrophenol, Benzo(g,h,i)perylene, Hexachlorocyclopentadiene,Hexachloroethane,Indeno(1,2,3-cd)pyrene and Pentachlorophenol are failing low but only dilution samples analysed under this CCAl so no corrective action required.

The Tuning criteria met requirements.

Samples C0B37, C0B38 were diluted due to high concentrations.

K6401 7 of 80



#### E. Additional Comments:

The Form 6 is not included in the data package because the Initial Calibration was performed using 7 points.

$$\text{Concentration } \mu\text{g/Kg(Dry weight basis)} = \frac{ (A_x) (I_s) (V_t) (DF) (GPC) }{ (A_{is}) (RRF) (V_i) (W_s) (D) }$$

Ax	=	Area of characteristic ion for the compound to be
		measured.
7.	_	Area of characteristic ion for the internal
Ais	_	standard.
I,	=	Amount of internal standard injected in ng.
Vi	=	Volume of extract injected in µL.
		Volume of the concentrated extract in µL (If no
V <sub>t</sub>	=	GPC cleanup is performed, then Vt = 1000 µL. If
		GPC cleanup is performed, then $V_t = V_{out}$ ).
		100 - %Moisture
D	=	100
Wa	=	Weight of Sample extracted in g.
		Mean relative response factor determined from the
RRF	=	initial calibration standard.
Vin		GPC factor.
GPC = V <sub>out</sub>	=	
Vin	=	Volume of extract loaded onto GPC column.
V <sub>out</sub>	=	Volume of extract collected after GPC cleanup.
		Dilution Factor. The DF for analysis of
		soil/sediment samples for semivolatiles by this
		method is defined as follows:
		μL most conc. extract used to make dilution + μL
DF	=	clean solvent
		uL most conc. extract used to make dilution
I		If no dilution is performed, DF = 1.0.
		I II no dilucion is bellotmed, br - 1.0.

Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <15% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 15% for the Initial Calibration curve for SW-846 analysis.

## **F. Manual Integration Comments:**

K6401 **8 of 80** 

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.



K6401 9 of 80

## **CASE NARRATIVE**

Weston Solutions Project Name: R35727

Project # N/A

Chemtech Project # K6401 Test Name: Pesticide-TCL

## A. Number of Samples and Date of Receipt:

6 Solid samples were received on 12/20/2019. 1 Water sample was received on 12/20/2019.

#### **B.** Parameters

According to the Chain of Custody document, the following analyses were requested: Pesticide-TCL, SVOC-TCL BNA -20, VOC-TCLVOA-10 and VOC-TCLVOA-10. This data package contains results for Pesticide-TCL.

#### C. Analytical Techniques:

The analysis was performed on instrument ECD\_L. The front column is ZB-MR2 which is 30 meters, 0.32 mm ID, 0.25 um df, Catalog #: 7HMG017- 11 The rear column is ZB-MR1 which is 30 meters, 0.32 mm ID, 0. 5 um df,: Catalog # 7HM-G016-17. .The analysis of Pesticide-TCLs was based on method 8081B and extraction was done based on method 3541.

#### D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria except for C0B37 [Tetrachloro-m-xylene(1) - 318%], C0B37DL [Tetrachloro-m-xylene(1) - 390%], C0B37MS [Tetrachloro-m-xylene(1) - 449%] and C0B37MSD [Tetrachloro-m-xylene(1) - 494%].

The Retention Times were acceptable for all samples.

The MS {K6401-02MS} with File ID: PL055188.D recoveries met the requirements for all compounds except for 4,4-DDD[949%], alpha-BHC[186%] and alpha-Chlordane[191%].

The MSD {K6401-03MSD} with File ID: PL055189.D recoveries met the acceptable requirements except for 4,4-DDD[903%] and alpha-Chlordane[187%].

The RPD for  $\{K6401-03MSD\}$  with File ID: PL055189.D met criteria except for alpha-BHC[57%].

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The Blank Spike met requirements for all samples.

The Blank analysis did not indicate the presence of lab contamination.

The Initial Calibration met the requirements.

The Continuous Calibration met the requirements.

Sample C0B37 was diluted due to high concentration.

#### E. Additional Comments:

#### F. Calculation for the Concentration in Soil Samples

Concentration ug/Kg =  $\underline{\text{(Ax) (Vt) (DF)}}$ (ICF) (Vi) (Ws) (D)

Where,

Ax = Area for the parameter to be measured.

ICF = average calibration factor for the calibration standards.

Vt = Volume of total extract in uL (Take into account dilutions)

Is = Amount of standard injected in nanograms (ng)

Vi = Volume of extract injected.

Vs = Volume of Aqueous extracted (mL).

 $D = \underline{100 - \% \text{ Moisture}}$ 

100

Ws = Weight of sample extracted (g).

#### **G. Manual Integration Comments:**

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.



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## ESAT DATA VALIDATION EVALUATION CHECKLIST Contract # EP-W-13-023

TDF #: 0120053	Revision: 0		Case #: R35727	SDG: C0B37	
Site Name: SHILOH CHURCH RO	AD				
Parameter(s): VOA/SVOA/PEST					
Method(s): SW 846 Methods 826	oc, 8270D a	nd 8081B			
Laboratory: Chemtech					
Reviewer:		Date Submitted to EPA: 5/19/2020			
				_	
EPA RPM/OSC: CHRIS WAGNER	3	Number of hours spe			
	WESTON)		Number of Samples/	Aliquots: 5/13	
Validation Level/Stage: M3/S4VN	Л		EDD: No		_
<u>CRITERIA</u>	<u>YES</u>	<u>NO</u>		COMMENTS	
Format according to Region III protocol					_
Clarity of report			_		_
Qualifiers applied correctly			_		_
Consistency between narrative and data summary form(s)			_		
Error-free transcription			_		
EFFICIENCY OF CONTRACTO	<u>R</u>				
Approval recommended for current submission			_		
Time spent on review is reasonable	$\boxtimes$				
			Non-responsive based on	revised scope	
	3	.7			
Technical Evaluation			_		
ESD OVERSIGHT DATES	T	PO	Oversight	ESAT	
Received at EPA		/2020	• /		_
Oversight assigned	5/19	/2020			
Oversight received			5/19/2020		
Oversight completed			5/19/2020		
Feedback given	5/19	/2020			
Mailed to RPM					

# **Data Validation Checklist - Organics**

TDF #: 0120053

Site Name: SHILOH CHURCH ROAD

SDG #: C0B37

Program: □ CLP ☑ Tier IV □ Other

Parameter: VOA/SVOA/PEST

SOW/Method: SW 846 Methods 8260C, 8270D, 8081B

Laboratory Code: CHM

Case/DAS #: R35727

SDG #: C0B37

DV Type: ☑ Org □ Ino □ HiRes □ Rad □ Asb

DV Regional Level: M3

DV Stage: S4VM

Reviewer

Due Date: 4/2/2020

#### General

CRITERIA	CHECK	COMMENTS
EPA Oversight Checklist		
TDF#	$\boxtimes$	
Case #	$\boxtimes$	
SDG #	$\boxtimes$	
Site Name	$\boxtimes$	
Laboratory	$\boxtimes$	
EPA OSC/RPM	$\boxtimes$	
CC: (Contractors)	$\boxtimes$	
Validation Level/Stage	$\boxtimes$	
Parameter	$\boxtimes$	
Number of Samples/Aliquots	$\boxtimes$	
Narrative		
Report Header	$\boxtimes$	
Report Footer	$\boxtimes$	
Overview		
Laboratory	$\boxtimes$	
Analytical method	$\boxtimes$	
Analytical services program	$\boxtimes$	
NFG reference	$\boxtimes$	
Validation level	$\boxtimes$	
Data package receipt date	$\boxtimes$	
Criteria		
Qualifier list	$\boxtimes$	
Appendix A		
Regional COC/ARF	$\boxtimes$	
Appendix B		
Laboratory narrative/Excerpts	$\boxtimes$	
Appendix C		
EXES report/Supplemental	$\boxtimes$	

General Comments:

Reviewed By:	Non-responsive based on revised scope		Date: _4/6/20_	
ESAT Region 3/IC	 F	1		

# Data Validation Checklist - Organics

Site Name: SHILOH CHURCH ROAD	SDG #: C0B37		
Program: ☐ CLP ☐ Tier IV ☐ Other	DV Type: ⊠ Org ☐ Ino ☐ HiRes ☐ Rad ☐ Asb		
Parameter: VOA/SVOA/PEST	DV Regional Level: M3		
SOW/Method: SW 846 Methods 8260C, 8270D, 8081B	DV Stage: S4VM		
Laboratory Code: CHM	Reviewer		

## Technical

Section	Check	Technical	Comments		
Overview	$\boxtimes$				
Matrix and # of samples	$\boxtimes$				
Field QC samples	$\boxtimes$				
Summary	$\boxtimes$				
Major problems	$\boxtimes$				
Minor problems	$\boxtimes$				
Notes	$\boxtimes$				
Compounds below CRQL	$\boxtimes$				
Blank contaminants	$\boxtimes$				
Field Duplicates	$\boxtimes$				
Field/Trip Blanks	$\boxtimes$				
Dilutions	$\boxtimes$				
Carryover	$\boxtimes$				
Manual integration	$\boxtimes$				
TICs	$\boxtimes$				
Calculation	$\boxtimes$				
SSRs/Form Is	$\boxtimes$				
Non-Detect RLs		Fixed DAG			
EDD	$\boxtimes$				
DV Item	C eck	Qualifier Applied	Comments		
Preservation/Holding Time	$\boxtimes$				
Instrument Performance Check	$\boxtimes$				
Initial Calibration	$\boxtimes$				
Continuing Calibration	$\boxtimes$				
Blanks	$\boxtimes$				
DMCs/Surrogates					
MS/MSDs	$\boxtimes$				
LCS/LCSDs					
Internal Standards	$\boxtimes$				
Other:					
General Comments:					

**General Comments:** 

# Data Validation Checklist - Organics

TDF #: 0120053	Case/DAS #: R35727			
Site Name: SHILOH CHURCH ROAD	SDG #: C0B37			
Program: ☐ CLP ☒ Tier IV ☐ Other	DV Type: $oxtimes$ Org $oxtimes$ Ino $oxtimes$ HiRes $oxtimes$ Rad $oxtimes$ Asb			
Parameter: VOA/SVOA/PEST	DV Regional Level: M3			
SOW/Method: SW 846 Methods 8260C, 8270D, 8081B	DV Stage: S4VM			
Laboratory Code: CHM	Reviewer somespones to based on revised to:			
	<del></del>			
Reviewed By:	Date:5/18/20			